HOW THE UNIVERSITY LIBRARIAN ENSURES THE RELEVANCE OF THE LIBRARY TO STAKEHOLDERS: A CONSTRUCTIVIST GROUNDED THEORY

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Submitted in fulfilment of the requirement for the degree of

Doctor of Philosophy

School of Information Systems

Faculty of Science and Engineering

Queensland University of Technology (QUT)

2017

Keywords

Academic libraries, constructivist grounded theory, continuous improvement, demonstrating value, digital disruption, dynamic capabilities of competitive advantage, evidence-based library practice, learning organisations, library reinvention, organisational culture, stakeholder engagement, stakeholder relationship management, strategic alignment, University Librarian.

Abstract

This thesis presents a substantive grounded theory that provides an understanding of how the University Librarian or chief executive officer (CEO) of the university library can ensure its relevance to stakeholders in the face of digital disruption caused by online open access information sources. Currently the disparate needs of the library's diverse range of stakeholders, the rapid changes in technological and information ecologies; and changes in university strategy caused by government higher education policy, and an increasingly competitive higher education environment present a significant challenge to university libraries globally.

A constructivist grounded theory research method enabled the researcher and 12 participants to co-construct a mid-range or substantive grounded theory that enables understanding of how the University Librarian can ensure the relevance of the library to its stakeholders. The research data derived from 11 initial semi-structured interviews with 10 University Librarians or Library Directors from a range of publicly funded university types. Three more interviews that included two extra participants were conducted during the subsequent theoretical sampling phase.

The theory presented in this thesis suggests that the University Librarian responds to these problems in a cyclical pattern where the following strategies interact with each other: aligning strategic vision with the university; reinventing the library; engaging with stakeholders; building an agile and engaged culture; and demonstrating value to the university. The strategy of building an agile and engaged culture is central to, and interacts with each of the other strategies. Key contributions of this work include: the important role of the University Librarian as the agent and model for library strategy and culture, and the attitudes and behaviours required of senior library leaders and staff in order to build a customer-focused, creative, learning and collaborating library culture. This research also identifies the importance of continuous realignment of the library's strategic goals in line with university strategy and constant reinvention of its services. The importance of engagement with stakeholders underlines an evidence-based approach to library management. Together, these strategies interact to sustain a library culture that is continually striving for improvement.

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List of Acronyms and Abbreviations

AI	Appreciative inquiry
ALIA	Australian Library and Information Association
ANDS	Australian National Data Service
ARL	Association of Research Libraries (United States)
ATAR	Australian Tertiary Admission Rank
ATN	Australian Technology Network
CAUL	Council of Australian University Librarians
CEO	Chief Executive Officer
CI	Continuous improvement
DVR	Deputy Vice Chancellor - Research
EBL	Evidence-based librarianship
EBLIP	Evidence-based library and information practice
ERA	Excellence in Research for Australia
ERIAL	Ethnographic Research in Illinois Academic Libraries
GFC	Global financial crisis
Go8	Group of Eight (Australia)
HERDC	Higher Education Research Data Collection (Australia)
HEW	Higher Education Work - salary level (Australia)
HR	Human resources
ICT	Information and computer technology
IRU	Innovative Research Universities (Australia)
IT	Information technology
ITOC	Information Technology Oversight Committee
ITS	Information Technology Services
KM	Knowledge management
KPI	Key performance indicator
LIS	Library and Information Science
MOOCS	Massive Open Online Courses
OCLC	Online Computer Library Center
QULOC	Queensland Libraries Office of Cooperation (Australia)
RIN	Research Information Network (UK)
ROI	Return on investment
RUN	Regional University Network (Australia)
SCONUL	Society of College, National and University Libraries (UK)
SES	Socioeconomic status
SSM	Soft systems methodology
TAFE	Tertiary and Further Education (Australia)
TEQSA	Tertiary Education Quality Standards Agency (Australia)
USSU	United States state university
VC	Vice Chancellor

Statement of Original Authorship

The work contained in this thesis has not been previously submitted to meet requirements for an award at this or any other higher education institution. To the best of my knowledge and belief, the thesis contains no material previously published or written by another person except where due reference is made.

Signature:

Date: 19/04/2017

Acknowledgements

This project would not have been possible without the help of all the University Librarians who generously gave of their time to prepare for and participate in the interview process. The University Librarian participants demonstrated great interest in this project and articulated learning and strategic management concepts that accelerated the process of coding and analysis. Their participation made this a truly co-constructed grounded theory. The theory we generated together belongs to them.

I would also like to thank my principal supervisor, Professor Glenn Stewart, for his insights, supportive attitude, high standards and thoroughness. Knowing I had a supervisor who was interested in the research, even though it was outside of his domain of expertise, kept my enthusiasm at high levels and made my task so much easier. I also thank my associate supervisor, Professor Christine Bruce, whose insights and expertise in the fields of academic libraries and LIS theory was invaluable. Adjunct Professor Helen Partridge was my initial principal supervisor, and I thank her for the encouragement and guidance in the first year of this journey.

The research endeavour is at times lonely, and the encouragement, support and advice of my peers within the Information Studies Group at QUT has been appreciated beyond measure. Thank you to Uti, Heri, Julie, Kathleen and Nilo for your encouragement, occasional advice, companionship for ISG group meetings, coffee, lunch, ALIA meetings and the occasional road trip.

I thank my daughters, Stephanie and Zoë, who tolerated some late dinners and pitched in when I was too busy. Steph's involvement as a QUT graduate and LIS student at the time of writing (2016) encouraged me to provide a quality contribution to the LIS profession. Thanks to Zoë, who is also a QUT graduate and a professional writer, who edited the final product.

Finally, and most importantly, I thank my husband, Tim Harland, whose confidence in me was the inspiration to begin this process. He encouraged me to the very end and continues to do so in everything I do.

Chapter 1: Introduction

This research explores how the University Librarian, as the executive leader or chief executive officer (CEO) of the library, can ensure the relevance of the university library to its stakeholders in the face of competition from online open access information. The University Librarian, as the CEO of the university library "can have a profound impact on organizational outcomes and the ability to innovate" (Jantz, 2012b, p. 4). The role of the chief executive leader of the library, the University Librarian, is also important because institutions that are successful innovators and change managers are led by individuals with "line authority" who drive the change, rather than by delegated committees or other team structures (Furst-Bowe & Bauer, 2007).

The digital disruption that is caused by the open access online information environment, and the fast pace of technological, social and political change means that the University Librarian must ensure that the library produces innovative products and services, that it continually realigns service strategies, and that it becomes astutely sensitive to changes in consumer behaviour and expectations (Chan & Soong, 2011; Teece, 2007). The University Librarian must do these things rapidly in order to maintain the library's competitive position within the university and ensure long-term survival (Jantz, 2012a, p. 526).

Chapter One of this study begins with a background to the research study, explaining the necessity for the research and outlining the research problem (section 1.1). It then frames the central research question that the study will investigate and defines the terms *University Librarian* and *stakeholders*. A brief overview of the overall interpretivist methodology and of the research method of constructivist grounded theory (section 1.2) is followed by statements about the purpose and scope of the research (section 1.3). Finally, the chapter includes an overview of the ensuing chapters (section 1.4).

1.1 THE RESEARCH TOPIC AND PROBLEM

1.1.1 Background to the Topic

At the current time, the chief executives of university libraries, or University Librarians, are faced with the acute challenges of a competitive open access information environment where libraries appear to have lost their monopoly on information (Hernon & Matthews, 2013, p. 4; Walton, 2008b, p. 773).

There is ample evidence that the library's digital resources have struggled to compete with open access information products such as YouTube, Wikipedia, open access journals and Google Scholar (Corrall, Kennan, & Afzal, 2013, p. 637; Gauder, 2011; Gwyer, 2015, p. 279). The prevalence of open access (OA) literature that is "digital, online, free of charge, and free of most copyright and licensing restrictions" (Suber, 2012, p. 4) has created a further competitive threat to academic libraries.

An OCLC® 2010 study of Americans' attitudes towards libraries in general found that 83 percent of U.S. college students began an information search with a search engine, and zero percent began a search with a library website (Gauder, 2011, p. 54). Figure 1.1 illustrates the findings of the OCLC report and demonstrates the problem academic libraries face in competing with open access online products. The blue bars depict where the American college students begin information searches.

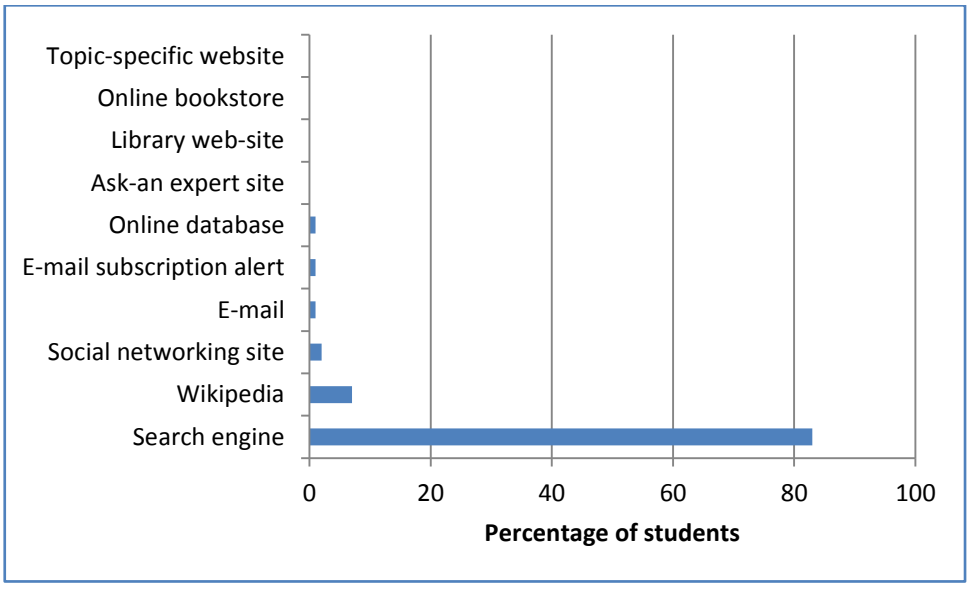

Figure 1.1. College students' first preference for information searching. Adapted by the author from Gauder (2011, p. 54).

Since 2010, there has been little change in this general searching behaviour because in 2014, another OCLC® report found that 79 percent of online learners use a search engine to begin an information search (De Rosa et al., 2014). These findings are supported by the research of Connaway, White, Lanclos and Le Cornu (2012) into the academic research behaviour of university students. This three-year longitudinal study found that Google and Wikipedia were the most popular search tool for students as a starting point when researching a topic. Higher degree students, academics and researchers are also heavy users of Google (Jamali & Asadi, 2010, p. 284). The research of Jamali and Asadi (2010), which studied physicists and astronomers, and of Haglund and Olsson (2008), which studied a variety of researchers, found that all researchers used Google as a starting point when searching for information, seldom using the university library web page.

More importantly, the competitive pressures of the digital information age have manifested in budget cuts to academic libraries. A study by the Society of College, National, and University Libraries (SCONUL) in the United Kingdom in 2009 showed that university expenditure on UK libraries is declining (Jubb, Rowlands, & Nicholas, 2013, p. 40). More importantly, a worldwide study of the Charleston Observatory in 2009 showed that as a result of the global financial crisis of 2008, 43.8 % of academic libraries surveyed had experienced budget cuts in 2009, and in 2010, 39.7% faced further budget cuts (Nicholas, Rowlands, Jubb, & Jamali, 2010, p. 377). A follow-up focus group study of UK University Librarians or Library Directors, funded by the Research Information Network (RIN), found pessimism for the future:

> There was a consensus that university libraries had experienced 10 golden years when they were seen to deliver much in regard to digital and remote access, and as a result had *really* changed academics' lives ("a quantum leap in provision" as one participant put it). The prevailing mood was that the golden age would not return and that the golden goose had laid its last egg. (Nicholas et al., 2010, p. 378)

A graph published by the Association of Research Libraries (ARL) ® in 2013 (Figure 1.2) demonstrates a marked decline in university library expenditure against rising overall university expenditure in the US over a period of almost 40 years. This survey averaged the results of 40 participant US institutions, and shows that in 1982

the libraries received about 3.7 percent of university expenditure, with the figure declining to roughly 1.8 percent in 2011.

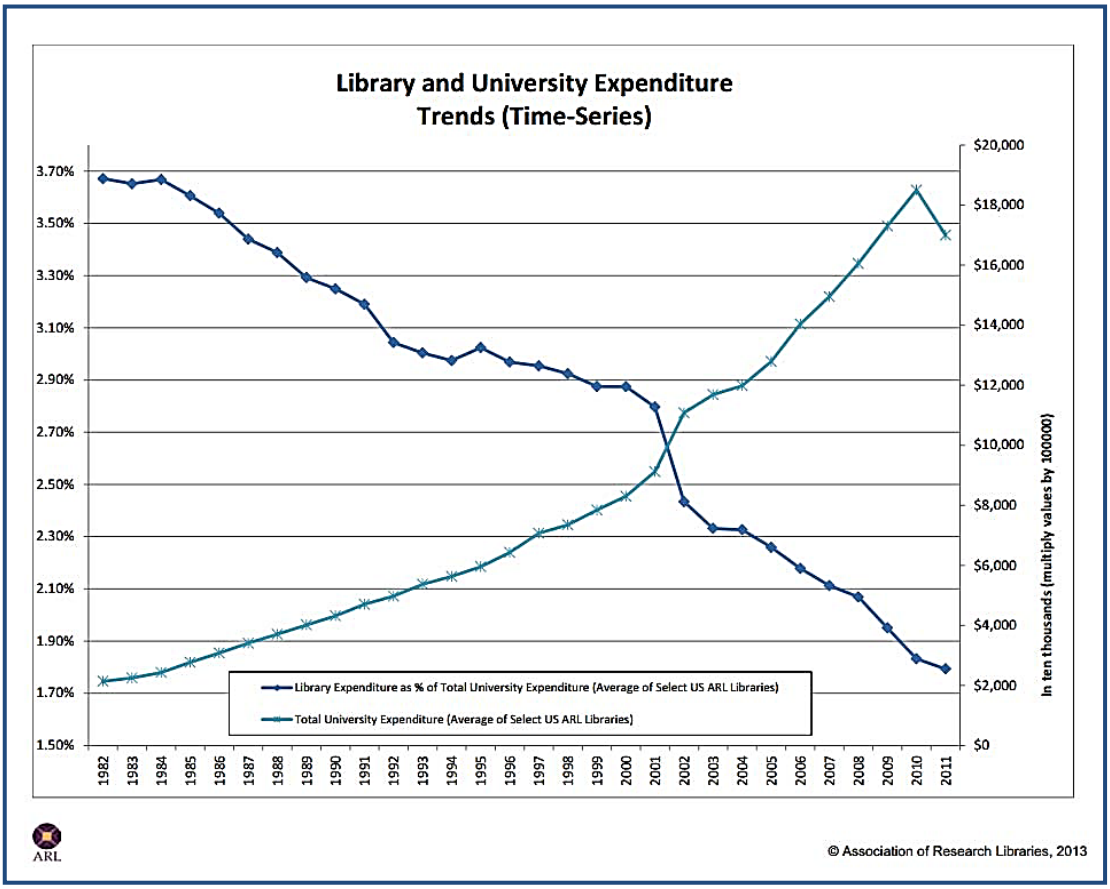

Figure 1.2. Library and university expenditure trends. (Association of Research Libraries, 2013)

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More recently, in 2014 the University of Sydney, an elite Australian university, announced plans to remove collections from four libraries, outsource technical services and make 60 percent of library jobs redundant (Sloane, 2014).

In response to these developments, some authors have urged academic libraries to provide efficient services and to adopt flexible business models that are sensitive to the current environment (Ball & Tunger, 2006, p. 563; Corrall et al., 2013, p. 638). Furthermore, some authors argue that academic libraries must demonstrate that they are successfully contributing to institutional goals (Jubb et al., 2013, p. 140).

Some academic libraries have responded in recent years by endeavouring to provide evidence they are providing return on investment for their stakeholders (Tenopir, 2011, p. 6). For example, Tenopir (2011) quotes a series of studies that correlated the return on investment in the e-journals collection with the return from

successful grant proposals. These studies showed that libraries that supported a high research output (evidenced through successful research grant applications that include citations from journals), showed greater return for investment than institutions that focused upon teaching (Tenopir, 2011, p. 11).

Academic libraries have also reacted to the current challenges by diversifying their services, developing specialties, and employing staff with hybrid skill sets. These new roles have included the data manager, informationist, or the information literacy educator (Cox & Corrall, 2013). These initiatives are well-documented and have included the development of specialist research support services (MacColl & Jubb, 2011) and bibliometric support services (Ball & Tunger, 2006; Corrall et al., 2013). The recent concept of relocating librarians from the library and embedding them within research departments or faculties is also an attempt to create stronger partnerships with faculty and researchers, enabling the librarian to understand the needs of clients (Carlson & Kneale, 2011, p. 167; Hamilton, 2013, p. 6). Another initiative that has gained momentum in recent years has been the establishment of research data management services (Corrall et al., 2013; Peters & Dryden, 2011), or institutional repositories (Holland & Denning, 2011; Swan, 2011). Finally, the introduction of resource discovery services (RDS) in many academic libraries has led to the reversal of the declining trends in usage of electronic resources (Shapiro, 2016; Spezi, Creaser, & Conyers, 2015)

1.1.2 Research Problem

As described in section 1.1.1, the rapid changes in technology, coupled with the continued budgetary pressures on libraries, have led to anxiety about the future and role of the academic library (Cox & Corrall, 2013, p. 1526). Cox and Corrall (2013, p. 1526) state that library and information science (LIS) literature is preoccupied with the future and the status of the profession. According to the Dean of Indiana University-Purdue University, Indianapolis University library,

> What is required is for academic libraries to find and articulate their roles in the current and future information ecology. If we cannot or will not do this, our campuses will invest in other priorities and the library will slowly, but surely atrophy and become a little used museum of the book. (Lewis, 2007, p. 2)

As seen in section 1.1.1 above, academic libraries have expended much energy in striving to achieve relevance to students, researchers and faculty, with varying levels of success (Cox & Corrall, 2013, p. 1526). Some of these initiatives are mentioned above and are well documented in the literature (Carlson & Kneale, 2011; Corrall et al., 2013; Cox & Corrall, 2013; Hamilton, 2013; Johnson, Adams Becker, Estrada, & Freeman, 2015; MacColl & Jubb, 2011; Peters & Dryden, 2011; Shapiro, 2016; Spezi et al., 2015; Swan, 2011).

This research is about the response of the University Librarian or Library Director to the challenges created by the competition from the open access online environment. This research does not seek to determine *what* University Librarians are doing to articulate the university library's role in the current and future information ecology. Rather, this research seeks to discover *how* University Librarians are finding and articulating the library's role. The purpose of this research is supported by the findings of the RIN focus group study (Nicholas et al., 2010), that:

> Give a strong sense that librarians are seeking a better understanding of the value proposition they offer to their universities, and of the linkages between their inputs and the teaching, learning and research outcomes that are achieved with their support. They thus need tools to make better sense of their environment, and to construct more powerful arguments to convince the senior managers in their universities of the value they provide. (p.382)

University Librarians or Library Directors also need to know how their library services support the learning and research outcomes of the university, demonstrate the library's tangible value in supporting research outcomes, and effectively communicate this value to university administrators (Jubb et al., 2013, p. 140).

In spite of the substantial body of literature cited above, which urges the need for change, there is a paucity of empirical research into the specific strategies and processes that the University Librarian or Library Director can use in ensuring their library's relevance to its stakeholders. This research investigates how the University Librarian can ensure the library's relevance to its stakeholders by exploring the strategies and processes that enable the library to deal with the challenges created by the current online open access information environment.

1.1.3 The Research Question

Therefore, the purpose of this exploratory research is to seek to answer the question:

> How can the University Librarian ensure the relevance of the university library to its stakeholders in the face of competition from open access information sources?

1.1.4 Defining Key Terms of the Research Question

The research question asks *how*, which means that it explores the strategies used by the University Librarian in ensuring the relevance of the university library to its stakeholders.

For the purposes of this research, the term *University Librarian* is used to refer to a role that is commonly called the University Librarian, the Library Director, or the Chief Executive (CEO) of the Library. The words are capitalised, referring to the specific role of the library CEO or Library Director, rather than to the generic professional title of *university librarians*.

According to Garrison, Ryan, and DeLong (2012, p. 137) this chief executive library role is responsible for defining the library's strategic direction, articulating its vision and participating in the academic life of the university. Indeed, a survey of American Library Association (ALA) job postings, undertaken between January 2009 to March 2011, demonstrated that the role of University Librarian is identified as a university-focused, rather than a library-focused role (Garrison et al., 2012, p. 142). The day-to-day work of the library is now frequently managed by a shared leadership team, often consisting of Associate University Librarians or functional department heads, while the University Librarian engages with the wider academic community (Garrison et al., 2012, p. 137).

This research defines *stakeholders* as anyone with a stake in the activity of the library. According to Bourne (2009) the stake may be "an interest; rights (legal or moral); ownership; contribution in the form of knowledge or support" (p.30). Many stakeholders have an interest and this involves anyone who may be affected by a certain decision or outcome (Bourne, 2009, p. 31). A stakeholder concerned about legal rights is concerned about legal protection, while others may be concerned about moral rights which can cover social issues that are not contained in legislation such

as corporate social responsibility (Bourne, 2009, p. 32). An ownership stake in a university setting could entail intellectual property, and knowledge applies to a staff member's contribution to the success of the university (Bourne, 2009, p. 32). Contribution can refer to the resources, funding or experience that can contribute to the success of the activity (Bourne, 2009, p. 32). The wide-ranging definition of stakeholders given above and applied to a university library includes all teaching, research and administrative staff, undergraduate and postgraduate students, and a broad range of community groups, communities of practice and professional groups. Further definition is provided by research participants themselves in Chapter Five.

1.2 METHODOLOGY

In this study, the researcher aims to interpret the actions, experiences and views of University Librarians, and therefore an interpretivist research method suits the research question (Creswell, 2013, p. 24). Interpretivism assumes that participants construct the meanings of situations and events, which the researcher interprets (Creswell, 2013). Because the researcher also accounts for time, interactions between people, and cultural and situational context, interpretivist research explores the detail of participants' experiences (Creswell, 2013). Chapter Three explains the research methodology further and provides a detailed rationale for its use.

The research question (section 1.1.3) also has a focus upon process and action, as reflected in the *how* part of the question. Charmaz (2014) defines process as consisting of:

> … unfolding temporal sequences in which single events become linked as part of a larger whole. Thus temporal sequences are linked in a process and lead to change. A process may have identifiable markers with clear beginnings and endings and benchmarks in between or may be much more diffuse and less visible but nonetheless evident when comparisons are made over time. (p.344)

The research design chapter (Chapter Four) explains how the process and action are identified, and the findings chapter (Chapter Five) describes how the temporal sequences lead to change.

This study employs *constructivist grounded theory* as its research method. According to Kathy Charmaz (2008, p. 398), constructivist grounded theory explores

action, answering the *what* and *how* questions. Constructivist grounded theory views the research as a mutual co-construction of the multiple realities of both researcher and participants (Charmaz, 2008, p. 402; 2009, p. 138). It also aims to deal with bias by ensuring the meanings of participants are interpreted correctly. Therefore, the researcher has chosen a constructivist grounded theory as the research method to explore the actions, processes and experience of the University Librarian in maintaining and extending the library's relevance to its stakeholders at the present time of open access.

Kathy Charmaz (2014) defines constructivism as:

> A social scientific perspective addressing how realities are made. This perspective brings subjectivity into view and assumes that people, including researchers, construct the realities in which they participate. Constructivist inquiry starts with the experience and asks how members construct it. To the best of their ability, constructivists enter the phenomenon, gain multiple views of it, and locate it in its web of connections and constraints. Constructivists acknowledge that their interpretation of the studied phenomenon is itself a construction. (p.342)

This research is rigorous in the application of constructivist grounded theory by closely following the steps of the method in the constant comparison and analysis of data. It also ensures the richest data is obtained through purposeful sampling (Patton, 2002, p. 45), close collaboration with expert participants, and through continuous reflexive activity in asking questions about the nature of the data and the depth and range of the sample (Charmaz, 2006, 2014; Patton, 2002, p. 66).

Semi-structured interviews are determined as the best means of co-constructing theory for this research. Because the research question explores the experience and actions of the executive leader, the richest data can be gleaned from a mutual co-construction of data between researcher and participants (Charmaz, 2014, p.58).

1.3 PURPOSE AND SCOPE OF THE RESEARCH

1.3.1 Purpose

The purpose of this research is to develop a *substantive grounded theory*. A substantive theory is defined by Charmaz (2014) as "a theoretical *interpretation* [emphasis added] or explanation of a delimited problem in a particular area" (p. 344).

Therefore, this research generates a substantive grounded theory that is a theoretical interpretation of how the University Librarian ensures the relevance of the university library to its stakeholders. This research brings an interpretive approach to the theory by recognising the role of experience, different standpoints and interactions of the researcher and participants (Charmaz, 2014, p.231). Indeed, Charmaz (2014) claims that one aim of interpretive theory is to "offer an imaginative theoretical interpretation that makes sense of the studied phenomenon" (p.231).

Generating theory is important in professions like library and information studies (LIS) because the application of theory to the functioning world can:

1. play an important role in advancing professionalism and maturity in the field,
2. help to dissolve the tension between research and practice, and
3. enable the development of tools for advancing theory and practice. (Lynham, 2013, p. 43)

1.3.2 Scope

According to Kathy Charmaz (2014), "most grounded theorists produce substantive theories addressing delimited problems in specific substantive areas" (p.10) (see also section 3.3.1). This research produces a substantive grounded theory where the scope is limited to libraries in the publicly funded university context. The scope includes a range of university types in Australia. The addition of two publicly funded universities in the United States provides an opportunity for comparison. These universities operate in a similar higher education environment, although American universities have a higher level of competition due to a larger private sector. A full explanation and rationale for the inclusion of American university libraries is provided in Chapter Five (section 5.1.3). Particular care has been taken to ensure sufficient depth and size of the sample to safeguard the professional credibility of this research (Charmaz, 2014, p.108). Private universities are excluded from the scope of this research.

1.4 THESIS OUTLINE

The following chapter (Chapter Two) provides more background to the threats university libraries face in ensuring their continuing relevance to stakeholders. Chapter Two reviews the literature in the area of academic library strategic

management, particularly exploring the concepts of the *learning organisation* (Garvin, Edmondson, & Gino, 2008; Huber, 1991; Marsick & Watkins, 1999, 2003; Örtenblad, 2004, 2013; Schwandt & Marquardt, 1999; Senge, 1990; Watkins & Marsick, 1993) and the *dynamic capabilities concept of competitive advantage* (Eisenhardt & Martin, 2000; Teece, 2007; Teece, Pisano, & Shuen, 1997). It also surveys the current research literature in library and information science (LIS) in order to demonstrate the research gap that justifies it as a significant addition to knowledge in the LIS field.

The literature review finds that while some LIS research uses the learning organisation framework to examine whether libraries are learning organisations, these are overwhelmingly single case studies, and none of them explore the role of the University Librarian. Moreover, the review finds that only one LIS research paper uses the dynamic capabilities concept of competitive advantage. Once again, this paper is a single case study examining a university library. Therefore, Chapter Two finds that there is a large research gap to be explored.

Chapter Three describes the interpretivist paradigm, which provides the overall philosophical background to the study. This chapter also describes the background to the grounded theory research method, detailing the three main types of grounded theory methods. Chapter Three then provides a rationale for the choice of constructivist grounded theory (Charmaz, 2014) as the method for this research.

Chapter Four describes the research design of the project in detail. The research design chapter begins by providing some background to the researcher's interest in the project and describes the process leading up to the formulation of the research question. The narrative of the research process includes descriptions of the sample size, the sampling techniques and the criteria for the inclusion of participants. The narrative also describes the semi-structured interviewing techniques, and explains the constant comparison of data and coding processes of data analysis. Following this, Chapter Four details the processes of theoretical sampling, saturation of data, theoretical coding, sorting of memos, and writing the substantive grounded theory. Finally, this chapter explains a final step of checking that the substantive grounded theory resonated with participants.

Chapter Five presents the researcher's interpretation of the findings. Five categories are presented: *aligning strategic vision with the university*; *continuously*

reinventing the library; *engaging with stakeholders*; *building an agile and engaged culture*; and, *demonstrating value to the university*. Chapter Five culminates with a visual model of the substantive grounded theory that demonstrates the relationship between the categories in an overall cyclical process.

Chapter Six is the concluding chapter, which critically discusses the findings of Chapter Five. This chapter summarises the substantive grounded theory and justifies how it meets the criteria as a constructivist grounded theory. This chapter also abstracts or *scales up* the substantive grounded theory of Chapter Five to the "higher level core categories" (Urquhart, Lehmann, & Myers, 2010, p. 372) or raises "categories to concepts" (Charmaz, 2014, p. 247). The scaled-up concepts are *strategy* and *culture*, and this research finds that they are mutually dependent. Neither can exist without the other. Chapter Six also critically discusses the variations in the data between each of the university types.

Chapter Six also includes a literature review for each category of the substantive grounded theory and for the overall theory. The literature review also discusses the project management literature of Bourne (2009), who produced a theory of *stakeholder relationship management*, and the literature on *evidence-based library and information practice (EBLIP)*. The literature review finds a relationship between the substantive grounded theory and each of the four theories reviewed in this thesis, but finds that this substantive grounded theory is original in a number of ways. This chapter includes an evaluation of the substantive grounded theory for its credibility, originality, resonance and usefulness (Charmaz, 2014). Chapter Six concludes with a discussion of the significance and limitations of the research.

Chapter 2: Literature Review

This literature review chapter builds upon the research problem as outlined in Chapter One. The purpose of the literature review is to discover a gap in research knowledge. This gap demonstrates that there is a problem that has not previously been investigated (Machi & McEvoy, 2012, p. 2).

In line with constructivist grounded theory practice (Charmaz, 2014), and being mindful of controversy in grounded theory concerning the literature review (Dunne, 2011; Giles, King, & de Lacey, 2013) (see also sections 3.3.4 to 3.4.3), this research began with the researcher's prior knowledge of the general management theories: learning organisation theory and dynamic capabilities theory. Specific theories that related to the research findings were investigated following the completion of the research and the development of the substantive grounded theory (see Chapter Six).

The reasons for the conduct of an initial literature review (Chapter Two) and a second in-depth literature review relating to the completed research findings (Chapter Six) are explained further in section 4.1. The relevant theories and their relationship to the generated theory are discussed in further detail in Chapter Six. These theories include stakeholder relationship management (Bourne, 2009) and evidence-based library practice (Connor, 2007; Eldredge, 2006; Hernon, Dugan, & Matthews, 2014).

This chapter discusses the existing research literature in three major areas, and by drilling down into the specific area of inquiry, discovers the research gap. The literature review is presented in the following way:

- Purpose, scope and limits of the literature review (2.1)
- Academic libraries in the current information ecology (2.2)
- The learning organisation (2.3)
- Dynamic capabilities concept of competitive advantage (2.4)
- The recent LIS research environment (2.5)
- Discussion of the research gap (2.6)

Section 2.1 provides a background to the research problem, articulates the research problem, and then discusses the purpose, scope and limits of the literature review. Section 2.2 examines in detail the problems academic libraries face in the current information ecology and the barriers they must overcome in order to maintain their relevance to stakeholders. While this research focuses upon university libraries, the term *academic libraries* is used in this chapter and in other places in this study because LIS literature uses the phrase as an umbrella term to cover a variety of post-secondary educational institutions that include university libraries.

Sections 2.3 and 2.4 discuss two management theoretical frameworks that enable organisations to continually improve and transform themselves in an environment of rapid change: learning organisation theory and the dynamic capabilities concept of competitive advantage. Section 2.5 critically examines the recent research that applies these theoretical frameworks to academic libraries. This section justifies the necessity of this particular research into the pivotal role of the leader in ensuring the relevance of the academic library to its stakeholders. Finally, section 2.6 discusses the research gap and the necessity for this research study.

2.1 PURPOSE, SCOPE AND LIMITS OF LITERATURE REVIEW

This literature review examines theoretical and research literature that relates to the research question:

> How can the University Librarian ensure the relevance of the university library to its stakeholders in the face of competition from open access information sources?

The literature review examines theories that explain how organisations in general maintain and extend their relevance to stakeholders, ensuring that they survive and thrive over the long term. In particular, two theories and their frameworks are explored here: learning organisation theory, and the dynamic capabilities concept of competitive advantage. These theories are discussed in full here because, as will be seen in section 2.5, very little LIS research addresses the strategies and processes that enable libraries to survive change and to thrive in a continually changing environment. The literature review discusses the literature that applies these theoretical frameworks to academic libraries and examines where there are the gaps in current research.

The literature review discusses innovation, but recognises that this is an output, rather than a process of the organisation that continually seeks to improve and transform itself, its products and services. Indeed, Jantz (2012b) argues that knowledge precedes innovation. Moreover, innovation has been studied more successfully as the output of individuals, rather than as an organisational output (Fowler, 1998, p. 221). Therefore, innovation, while related, is an area for separate research. The literature review also focuses upon the role of the University Librarian as the executive leader who produces the strategies to achieve relevance. Therefore, the processes of middle management, teams and individuals are not covered.

Figure 2.1 below shows how the actions of the University Librarian lead to innovation outputs. The diagram illustrates the overlapping strategies and processes of learning organisation and dynamic capabilities theories. These theories are the basis for the sensitising concepts for the interview protocol and for the later stages of this research (Charmaz, 2006, p. 11).

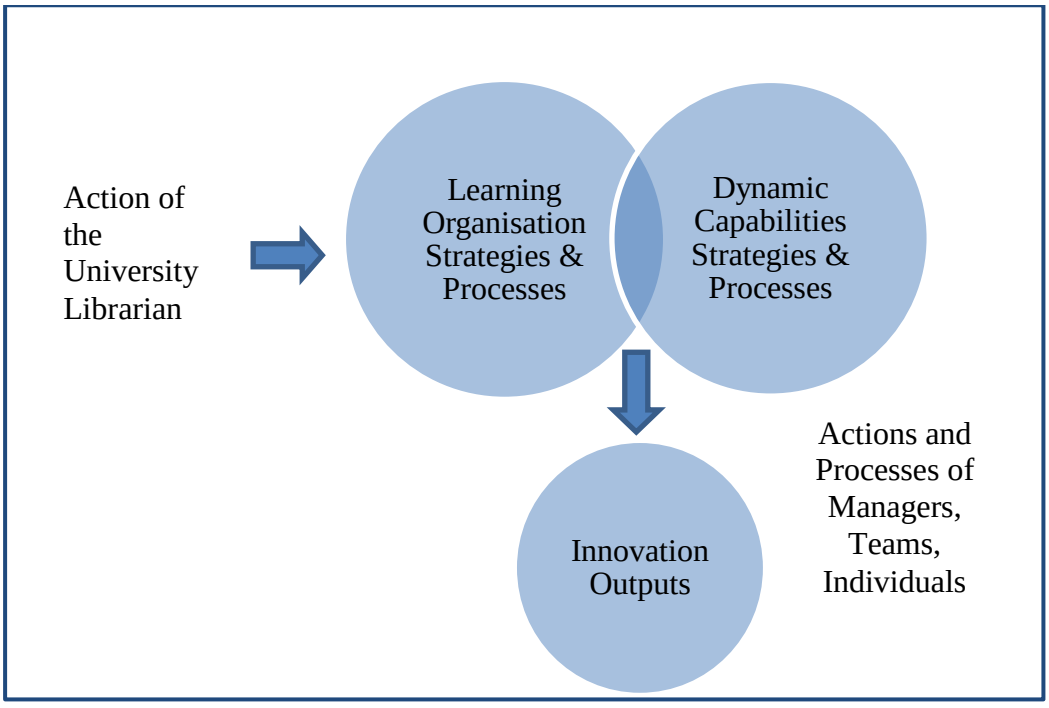

Figure 2.1. The action of the University Librarian in ensuring the relevance of the academic library to stakeholders

2.2 ACADEMIC LIBRARIES IN THE CURRENT INFORMATION ECOLOGY

2.2.1 The Crisis in Academic Libraries

The current information ecology has resulted in greater pressure upon the academic library to continually produce new products and services in order to maintain its relevance to its stakeholders. In the United States in the 1980s academic libraries were forced into major change by the need to become viable players on the campus (Jurow, 1996, p. 300). Since the global financial crisis of 2008, academic libraries worldwide have faced trends that precipitated the requirement for major operational changes (Trzeciak, 2010, p. 85). This external financial crisis was compounded by sharp increases in academic journal prices (Grafton, 2009, p. 90), forcing libraries to cancel subscriptions and search for cheaper alternatives. The proliferation of information resources in print form in recent years also created a spatial crisis (Grafton, 2009, p. 97), which was initially relieved by building projects. However, according to Grafton (2009, p. 92), university administrators have become less tolerant of using library space for the expansion of print collections.

In addition to these factors, the concurrent proliferation of digital data through Google Books, Google Scholar, and open access publishing (Grafton, 2009, p. 89; Shapiro, 2016, p. 25) has also led to a public relations and marketing crisis for academic libraries. According to (Shapiro, 2014, 2016) easy remote access to digital resources has led to a decline in usage of a number of library services, and according to Hernon and Matthews (2013), the library has become "invisible" to faculty and students. Indeed, according to two recent research reports (De Rosa et al., 2014; Johnson et al., 2015), students are using the library and its technology "as a place to be productive" (Johnson et al., 2015, p. 10), rather than for accessing information.

A study of five university libraries across Illinois (the Ethnographic Research in Illinois Academic Libraries – ERIAL Project), which was completed in 2010, found that students did not understand the work of the library or librarians, or the ways in which they could support student research (Asher & Duke, 2012b, p. 162). The study suggested that the reason for this was that students did not have the opportunities to build relationships with librarians, and therefore relied upon the teaching staff or their peers for assistance with research (Asher & Duke, 2012b, p.163).

This failure of stakeholders to recognise the role, function and resources of the library is compounded by changes in the work habits of academics, researchers and students. Many studies demonstrate the trend of students, researchers and academics, who no longer physically visit the library or borrow its print resources, but increasingly access its digital resources remotely (Falciani-White, 2013, p. 177; Grafton, 2009, p. 92; Leong & Anderson, 2012, p. 492; Renner et al., 2014, p. 119). Studies by Ge (2010, p. 450) and Falciani-White (2013, p. 177) demonstrate this trend of client preference for researching the web, journal databases and e-journals through remote access. Indeed, a number of studies reveal the user preference for web searches as a starting point when beginning research (Connaway, White & Lanclos, 2011; Gauder, 2011; Haglund & Olsson, 2008; Jamali & Asadi, 2010).

Importantly, the ERIAL project at Illinois Wesleyan University discovered that this increasing physical remoteness from the library had disastrous effects upon the information literacy skills of students and their research habits (Asher & Duke, 2012a, p. 162). Asher and Duke (2012b, p. 84) found during the ERIAL study, that familiarity with Google had led to an expectation of instant search results in searching library resources. This led to a disinclination to refine search strategies when results were not immediately evident, or to seek help from librarians (Asher & Duke, 2012b, p. 84). These findings echo the earlier research of Connaway, Dickey, and Radford (2011), who found that convenience of information is the most important factor in information seeking-behaviour. This included convenience in both the choice of a resource and in ease of access (Connaway, Dickey, et al., 2011).

These changing circumstances have led to a major change in the role and functions of the academic library. The library is no longer the caretaker and storehouse of information, but now provides greater accessibility for clients through 24 hour electronic services (Bryson, 2011, p. 4). The academic library has also become consumer driven, due to students' increased expectations of service delivery (Appleton, Stevenson, & Boden, 2011, p. 347; Bryson, 2011, p. 4). It now focuses upon enhancing the student experience (Appleton et al., 2011, p. 348; Bryson, 2011, p. 5). The results of the ERIAL project showed that where faculty strongly support building library-student relationships, students will seek the librarian's help (Miller & Murillo, 2012, p. 65). Therefore, in recent years, the academic library has focused upon creating partnerships with faculty which encourage embedding information

literacy training in courses and building library-student relationships (Armstrong, 2012; Asher & Duke, 2012a, p. 161).

The movement to client self-service and the use of electronic resources means financial savings through the reduction in staff numbers previously involved in circulation services and maintenance of physical print resources. The digital environment also means a reduction in the costs of storage and retrieval of physical collections, and diminishes the consistent need for the library to find extra physical space for its growing resources (Bryson, 2011, p. 5). These recent changes demonstrate how the continuing fast pace of technological innovation and increased consumer expectations have led to the imperative for a dynamic approach to change and innovation.

2.2.2 The Barriers to Maintaining and Extending the Relevance of the Academic Library

There are a number of barriers that hinder the continued relevance of academic libraries. Firstly, academic libraries are usually part of public sector organisations that can be resistant to change (Rowley, 2011, p. 252). Universities are large bureaucratic structures which, according to Plant (2009) are "status quo oriented, centralized, and process oriented" (p.39). Universities possess academic *norms* and expectations that can create resistance to change, particularly if the change emanates from the library (Trail, 2013, p. 214). This view is supported by Jantz (2012b, p. 5) and Jantz (2012a, p. 527) , who observes that academic libraries are often subjected to coercive pressures from their parent institution.

Secondly, within the university, the library is often competing with rival academic and administrative departments for resource funding (Hernon & Matthews, 2013, p. 4; Jantz, 2012b, p. 10; Lewis, 2007, p. 2). These factors create challenges for University Librarians who must ensure the long-term sustainability of the university library by maintaining the importance of its role to its stakeholders. Thirdly, university libraries themselves are bureaucratic organisations that have maintained traditional structures (Franklin, 2010, p. 78). Franklin (2010, p. 77) quotes an informal 2008 survey of academic libraries in the United States, which found that in spite of some name changes, organisational structures were still based upon traditional library functions such as technical services, access services, or user services.

Another impediment, according to Jantz (2012a, p.527; 2012b, p.5), is that academic libraries tend to mimic the services or products of other libraries; they do not create original products or services themselves. This tendency to copy other libraries is also confirmed by Franklin (2010, p. 75), who observed that library strategic plans are often drafted by staff who use the plans of other libraries, rather than the strategic plans of their own institution. Similarly, innovation in academic libraries is often the result of collaboration between librarians across institutions rather than the result of ideas originating within the library (Rowley, 2011, p. 252; Tait & Blinco, 2014, p. 95). While this collaborative approach across the profession is seen as helpful, the propensity to copy from other libraries rather than to generate original ideas or innovations, can lead to incremental, rather than radical innovations (Jantz, 2012b, p. 9). These innovations can also rapidly become redundant because they are not tailored to the needs of the library's stakeholders.

Another barrier to innovation is that the service environment of the library means that it operates according to "mission milestones" (Hernon & Matthews, 2013, p. 14). Traditionally, such targets and milestones revolved around collection size and usage. However, Hernon and Matthews (2013, p. 14) and Franklin (2010, p. 82) argue for milestones, performance outcomes, and targets that are aligned to university strategic plans and relate to user satisfaction and linkages to student learning outcomes.

The *norms* of the library profession of formal education and professional networks tend to impede, rather than enable learning, innovation and change (Jantz, 2012a, p.527; 2012b, p.5). The norm of professionalism hinders innovation if individuals are seen to be learning, but do not possess an innovative mind set (Jantz, 2012b, p. 5). In the academic environment librarians tend to have a collegial approach to governance (Franklin, 2010, p. 79). This non-competitive workplace culture is conducive to shared learning, but means less emphasis upon creativity and the production of results (Perry & Woodsworth, 1995, p. 118).

Finally, according to Hernon and Matthews (2013, p. 180), younger librarians are not represented well in academic libraries. This may suggest that changes are required in responsibilities and required skill-sets, in order to attract a younger demographic (Hernon & Matthews, 2013, p. 180). Table 2.1 below describes the barriers to be overcome in order for academic libraries to maintain and extend their

relevance in the current and future social, technological, and institutional environment.

Table 2.1

The Barriers to Maintaining and Extending the Relevance of the Academic Library

Barriers to Maintaining Relevance of the Academic Library	Literature
Part of public sector universities that can be resistant to change.	Rowley, 2011, p.252; Plant, 2009, p.39; Trail, 2013, p.214; Jantz, 2012b, p.5.
Library is competing with rival academic and administrative departments for resource funding.	Hernon & Matthews, 2013, p.180.
Academic libraries can be bureaucratic with traditional structures.	Franklin, 2010, p.78.
Academic libraries tend to mimic systems/products/services of other libraries rather than tailor products to the needs of their clients.	Jantz, 2012b, p.5; Franklin, 2010, p.75.
Academic librarians' professional culture means academic libraries collaborate with each other – leads to lack of creativity within library.	Rowley, 2011, p.252
Service environment means the library traditionally operates according to mission milestones based upon collection size and usage.	Hernon & Matthews, 2013, p.14
Professional norms of qualifications and networking hinder change/learning/innovation if individuals are not creative or innovative.	Jantz, 2012b, p.5
Non-competitive workplace culture means less emphasis on creativity and results.	Perry & Woodsworth, 1995, p.118
Younger librarians not represented well in academic libraries.	Hernon & Matthews, 2013, p.180

In order to deal with the current crisis for academic libraries in the open access information age (section 2.2.2) and to overcome the organisational and professional barriers that hinder efforts to maintain and extend relevance, the University Librarian's role encompasses setting its strategic direction (Garrison et al., 2012, p. 137). Therefore, this literature review covers two general strategic management theories that explain how the University Librarian can enable goal setting in order to achieve relevance to stakeholders. The strategic management theories are: learning organisation theory and dynamic capabilities of competitive advantage.

2.3 THE LEARNING ORGANISATION

2.3.1 Definition of the Learning Organisation

According to Senge (1990), the learning organisation is:

> …where people continually expand their capacity to create results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free, and where people are continually learning how to learn together (p.3).

Marsick and Watkins (1999) define the learning organisation as "one that is characterized by continuous learning for continuous improvement, and by the capacity to transform itself" (p.10). Yang, Watkins, and Marsick (2004) state that "the construct of the learning organization normally refers to organizations that have displayed these continuous learning and adaptive characteristics, or have worked to instil them" (p.34).

Watkins and Marsick (1993) argue that learning is important for organisations because:

> Learning is a continuous, strategically used process – integrated with, and running parallel to, work. Learning results in changes in knowledge, beliefs, and behaviors. Learning also enhances organizational capacity for innovation and growth. The learning organization has embedded systems to capture and share learning (p.9).

Schwandt and Marquardt (1999, p. 10) agree that learning is necessary because it increases the ability of employees to improve products and services. They emphasise that change is dependent upon the capacity of the organisation to learn, and that learning is the means of increasing the cognitive capacity of the entire organisation (Schwandt & Marquardt, 1999, p. 25).

While there is some concern that change does not always lead to desirable outcomes (Smith & Tosey, 1999), most learning organisation authors agree that the learning organisation is the end product of a purposeful effort to achieve a state of continual learning, which then results in changes in organisational culture and behaviour (Schwandt & Marquardt, 1999, p. 26; Sun & Scott, 2003, p. 203).

The learning that leads to organisational change originates when individuals question the assumptions, strategies, and processes contributing to low productivity

and results (Hong, 1999, p. 48; Ross, Smith, Roberts, & Kleiner, 1994, p. 48). Schein, in Coutu (2002, p. 104) and Sun and Scott (2003, p. 211) characterise this as the realisation that the individual or the organisation may not survive. They call this *survival anxiety.* This anxiety and subsequent questioning leads to learning. The perceived necessity for transformation then requires improvement in the organisation's learning capacity in order to rapidly learn and adapt to environmental change (Easterby-Smith, Snell & Gherardi, 1998, p.260; Schwandt &Marquardt, 1999, p.3). Indeed, according to Jantz (2012b, p. 10) learning and the creation of new knowledge are important precursors to innovation.

It is important to note here that the concept of the *learning organisation* is distinct from concept of *organisational learning.* Organisational learning literature, which began with the work of Argyris and Schön (1978) and Argyris and Schön (1996), deals primarily with individual learning processes and assumes that, with little effort from the organisation itself, the learning of the individual benefits the organisation, and then leads to change in organisational behaviour (Sun & Scott, 2003, p. 204).). However, organisational learning theory does not clearly explain how individual learning overcomes organisational processes and systems (Sun & Scott, 2003, p. 205). In addition, there is a general recognition that organisational learning describes and analyses the learning process that occurs within an organisation, yet remains an academic and theoretical discipline (Easterby-Smith, Snell & Gherardi, 1998, p.262; Örtenblad, 2001, p.128).

2.3.2 Executive Leader of the Learning Organisation

This research focuses upon the role of the executive leader of the academic library because the higher education institution delegates the academic library leader considerable power to control strategy, organisational structure and organisational culture (Jantz, 2012b, p. 4). Indeed, Giesecke and McNeil (2004) assert the importance of the library manager in leading change.

According to Senge (2006, p. 320), the executive leader shapes the organisational environment, developing purpose, values and vision, dealing with any structural impediments to this vision, and finally, being the embodiment of those values. In short, the effective executive leader is the credible role model for the learning organisation through the practice of learning. However, Senge (2006, p. 340) states that the effective leader recognises the creative tension between

possessing vision while also being honest about current realities. This statement infers that vision cannot exist independently of activities such as scanning the internal and external environment for knowledge.

Marsick and Watkins (1999, p. 159) state that learning organisation leaders are change agents who themselves model learning. Leaders achieve a learning organisation by attending to strategies for achieving change, and by leadership behaviour that supports this strategy. In short, the learning organisation model proposed by Watkins and Marsick integrates people and structure (Yang et al., 2004, p. 34).

This view of the leadership role is shared by Pearn, Roderick, and Mulrooney (1995, p. 113), who argue that the executive leader strategically creates a shared vision and values and gains commitment to them. Executive leaders ensure that structures and systems don't inhibit learning, and they establish performance indicators to achieve continuous learning (Pearn et al., 1995, p. 113). The executive leader gains commitment to the vision and values by embodying those values in their own behaviour. This involves empowering people to act and supporting staff initiatives by providing resources.

Watkins and Marsick's framework posits that leaders enable learning through attention to four areas:

1. Learning culture that supports learning by tolerating mistakes, empowering staff to learn, and policies that encourage and reward knowledge and knowledge sharing.
2. Decentralising the structure from hierarchical to team based.
3. Strategy that focuses upon innovation.
4. Provision of reserves in the form of employee knowledge, technology, knowledge management systems, and financial resources for learning. (Watkins & Marsick, 1993, p. 166)

These actions will be discussed further in relation to LIS research in section 2.5.

2.3.3 Criticism of Learning Organisation Theory

A criticism of the learning organisation discipline is that it is regarded by many authors as prescriptive and practitioner-oriented, rather than theoretical (Örtenblad, 2001, p. 128; Tsang, 1997, p.85). Sun and Scott (2003) argued that learning organisation literature ignored the importance of tacit knowledge, which is embedded

in people and is difficult to replicate, and that the frameworks paid little attention to the important function of human resources management in providing a psychologically safe environment where positive social interaction enhances learning.

Another criticism of the learning organisation discipline is that, in general, learning organisation theory emerged from a business and manufacturing base, and ignored the service sector (Örtenblad, 2013, p.39). This is largely because of the complexities in measuring service productivity. Services deal in intangible products, and productivity is often determined over time and cannot be measured by profits or growth (Djellal & Gallouj, 2013; Gardiner & Whiting, 1997, p. 43; Perry & Woodsworth, 1995, p. 117). Service providers also differ from business enterprise because they have a close relationship with the customer, and therefore services are measured by the quality of the personal relationship, as well as by the quality of the service itself (Antonacopoulou & Kandampully, 2000, p. 13; Djellal & Gallouj, 2013, p. 286). The public non-market sector, to which academic libraries belong, is also characterised by public accountability and the need to address the interests of stakeholders (Smith & Taylor, 2000, p.197).

2.3.4 Learning Organisation Theoretical Frameworks

Learning organisation literature attempts to provide a systematic and practical framework for the implementation of organisational learning (Easterby-Smith, Snell & Gherardi, 1998, p.269) . Moreover, learning organisation authors regard learning as a communal, collaborative and social activity, where most learning occurs while on the job and within a "community of practice" (Brown & Duguid, 1991, p.46; Easterby-Smith & Araujo, 1999, p. 9). Most learning organisation authors believe that the learning process can be defined: the levels are distinct, the organisational processes can be distinguished and that successive levels are desirable for organisations wishing to increase learning capacity (Easterby-Smith & Araujo, 1999, p.10; Hong, 1999, p.176).

Senge's important work (1990) recognised the way learning occurs throughout each level of the organisation and proposed a model of learning at each level. He suggested that learning occurs at executive level through *shared vision* and *systems thinking*; team level through *team learning*; and individual level through *personal mastery* and *mental models*.

Watkins and Marsick (1993) and Marsick and Watkins (1999) produced a model that shows how learning is orchestrated through attention to systems. The work of Watkins and Marsick (1993) is significant because it is based upon the research of Meyer (1982) into the way 19 hospitals responded to a major strike by physicians. The hospitals that responded best to the strike were those that:

- Encouraged surveillance of the environment
- Fostered strategic reorientations
- Embraced organizational changes
- Valued members' capabilities
- Encouraged participation (Watkins & Marsick, 1993, p. 158)

Meyer's (1982) study found that a decentralised structure and an entrepreneurial culture lead to long-term learning (Watkins & Marsick, 1993, p. 158). The Watkins and Marsick model was updated in 1999 (Marsick & Watkins, 1999) and is reproduced below at Figure 2.2. This model emphasises that the executive leader provides strategic leadership for learning and connects the organisation to its wider environment. The executive leader then ensures this is managed within the organisation by establishing systems for creating and sharing learning, and empowering people through a shared vision (Watkins & Marsick, 1993, p. 11). At the team level collaboration and team learning are encouraged; and at the individual level, the learning organisation promotes inquiry and dialogue and creates continuous learning opportunities (Watkins & Marsick, 1993, p. 11). This model also emphasises that collaboration and team learning are encouraged at all levels across the organisation.

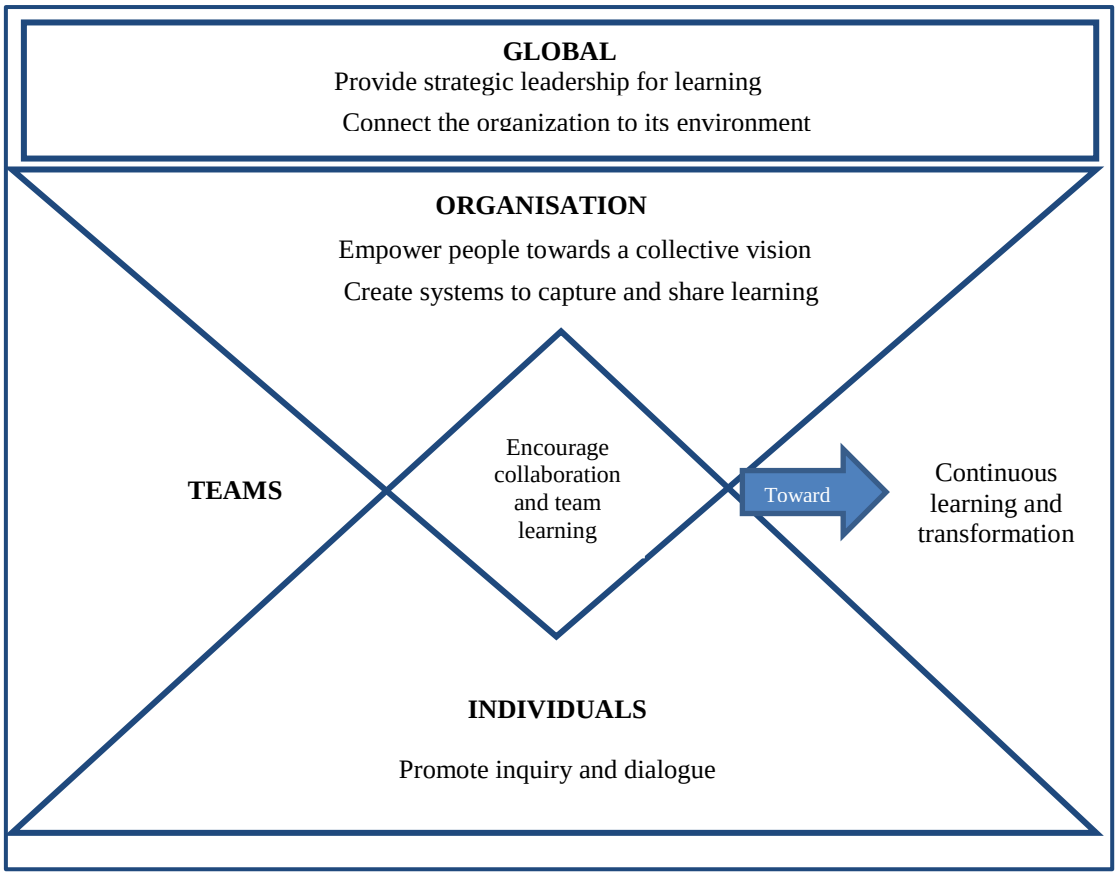

Figure 2.2. Learning Organization action imperatives (Marsick & Watkins, 1999, p.11)

A further important contribution to the learning organisation field was Huber's *Four Constructs*, which created a framework of *knowledge acquisition*, *information distribution*, *information interpretation* and *organisational memory* (Huber, 1991, p. 90). Huber's *Four Constructs* has been widely accepted by other authors (Hong, 1999, p. 175).

This framework was distilled by Nevis, DiBella, and Gould (1995, p. 74) into three fields: *knowledge acquisition*; *knowledge sharing* or dissemination; and *integration of learning*, which also included systems thinking. Pearn et al. (1995, p. 40) also proposed a model which encompassed six areas of learning: *inspired learners*, *nurturing culture*, *vision for the future*, *enhanced learning*, *supportive management*, and *transforming structures*.

Örtenblad (2004) proposed an integrated learning organisation model that featured the four integrated aspects of: *organisational learning*; *learning at work*; developing a *learning climate*; and creating *learning structures*. His concept of organisational learning involves gathering the learning of individuals, storing it in the

organisational memory of routines, plans, manuals and policies, and putting it into practice (Örtenblad, 2004, p. 133). This is also known as knowledge management (KM).

According to Karkoulian, Messarra, and McCarthy (2013):

> … The ultimate goal of KM is to formalize, store, share, distribute, coordinate available knowledge throughout the organization, and develop and utilize core aptitudes and competences that stimulate outstanding performance. (p.513)

Örtenblad (2004, p. 134) also identified the importance of learning at work or communal and collaborative learning. The third concept of learning climate requires the organisation to facilitate a positive learning atmosphere, where experimentation is encouraged and mistakes are forgiven (Örtenblad, 2004, p. 134). Finally, learning structure requires a decentralised organisational structure of self-directed teams, which empowers employees to contribute to goals and to participate in decision making (Örtenblad, 2004, p. 134).

Table 2.2 below provides an overview of some of the extant learning organisation frameworks. This table categorises each author's conceptual framework/model according to the concepts from Örtenblad's (2004) learning organisation model. Örtenblad's (2004) concepts have been mapped to the following simplified table headings: *Knowledge management*, *Knowledge sharing*, *Learning culture* and *Vision*. As the table demonstrates, some of the concepts can be shared across categories. For example, *Establish systems to capture and share learning* (Marsick & Watkins, 1999; Watkins & Marsick, 1993) is located under the table headings of *Knowledge management* and *Knowledge sharing*. The table also demonstrates a common criticism of the learning organisation concept: that the learning organisation models and frameworks as proposed by Senge, Huber, and others, do not provide a coherent theory, are vague and abstract, and do not give the leader clear guidance (Fowler, 1998, p.222; Örtenblad, 2004, p. 129; Örtenblad, 2013, p. 8; Tsang, 1997, p. 80).

The work of Watkins and Marsick (1993) and Marsick and Watkins (1999) appear to provide the clearest explanation of all frameworks provided in Table 2.2. This view is supported by Fowler (1998), who argues that Watkins and Marsick (1993) describe "operational terms that may be more readily tested" (p.22). Fowler

also judges that their ideas have an empirical basis in a number of case studies. Fowler was writing before the later work of Marsick and Watkins (1999) appeared, and this researcher considers this later work to be more comprehensive because it adds the global leader action of *Provide strategic leadership for learning.* Therefore, for the sake of brevity and clarity, this research will refer to the framework of Marsick and Watkins (1999) in describing learning organisation processes.

Table 2.2

Proposed Learning Organisation Frameworks from Senge (1990) to Örtenblad (2004, 2013)

Knowledge Management	Knowledge Sharing	Learning Culture	Vision
***Organisational learning (Organisational memory – routines, rules, manuals)** Örtenblad (2004,2013)	***Learning at Work (Workplace learning – communal/social learning)** Örtenblad (2004, 2013)	***Learning climate (Experimenting, learning from mistakes, positive climate for reflection)** ***Learning Structures** Örtenblad (2004, 2013)	***Learning Structures (Non-hierarchical structure, empowering staff to make decisions)** Örtenblad (2004, 2013)
***Enhanced learning** ***Transforming structures** Pearn, Roderick & Mulrooney (1995)	***Enhanced learning** ***Transforming structures** Pearn, Roderick & Mulrooney (1995)	***Nurturing culture** ***Inspired learners** ***Supportive management** ***Transforming structures** Pearn, Roderick & Mulrooney (1995)	***Vision for the future** Pearn, Roderick & Mulrooney (1995)
***Knowledge Acquisition** Nevis, DiBella & Gould (1995)	***Knowledge Sharing** Nevis, DiBella & Gould (1995)		***Integration of Learning** Nevis, DiBella & Gould (1995)
***Establish systems to capture and share learning** ***Connect the organisation to its environment** Watkins & Marsick (1993) Marsick & Watkins (1999)	***Establish systems to capture and share learning** ***Encourage collaboration & team learning** ***Create continuous learning opportunities** Watkins & Marsick (1993) Marsick & Watkins (1999)	***Promote inquiry & dialogue** ***Encourage collaboration & team learning** Watkins & Marsick (1993) Marsick & Watkins (1999)	***Empower people towards a collective vision** ***Provide strategic leadership for learning** ***Connect the organisation to its environment** Watkins & Marsick (1993) Marsick & Watkins (1999)
***Knowledge acquisition** ***Organisational memory** Huber (1991)	***Information distribution** Huber (1991)		***Information interpretation** Huber (1991)
***Mental models** Senge (1990)	***Team learning** Senge (1990)	***Team learning** ***Personal mastery** ***Systems thinking** Senge (1990)	***Shared vision** ***Systems thinking** Senge (1990)

2.3.5 Recent Developments in Learning Organisation Research

While there is a large body of literature addressing the learning organisation at individual, team and organisational levels, little of it focuses upon the management strategies that enable learning. Much of the general learning organisation research consists of case studies of organisations, rather than focusing upon the actions of the leader.

Recent developments in learning organisation scholarship have focused upon creating measurement instruments and the creation of new theoretical models for different organisational contexts. For example, Marsick and Watkins (2003) created the *Dimensions of the Learning Organization Questionnaire (DLOQ)* as a tool for measuring learning, and Garvin, Edmondson, and Gino (2008) developed the *Learning Organization Survey*.

Table 2.2 above appears to demonstrate a waning of academic interest in the learning organisation concept. This is illustrated by the fact that the last learning organisation framework was developed by Örtenblad in 2004. However, there is a growing body of learning organisation research literature. This is exemplified by Figure 2.3 (below), which depicts the results of a literature search of the learning organisation idea as conducted by Örtenblad et al. in 2013. This chart portrays a growing body of literature covering the application of the learning organisation concept to specific contexts.

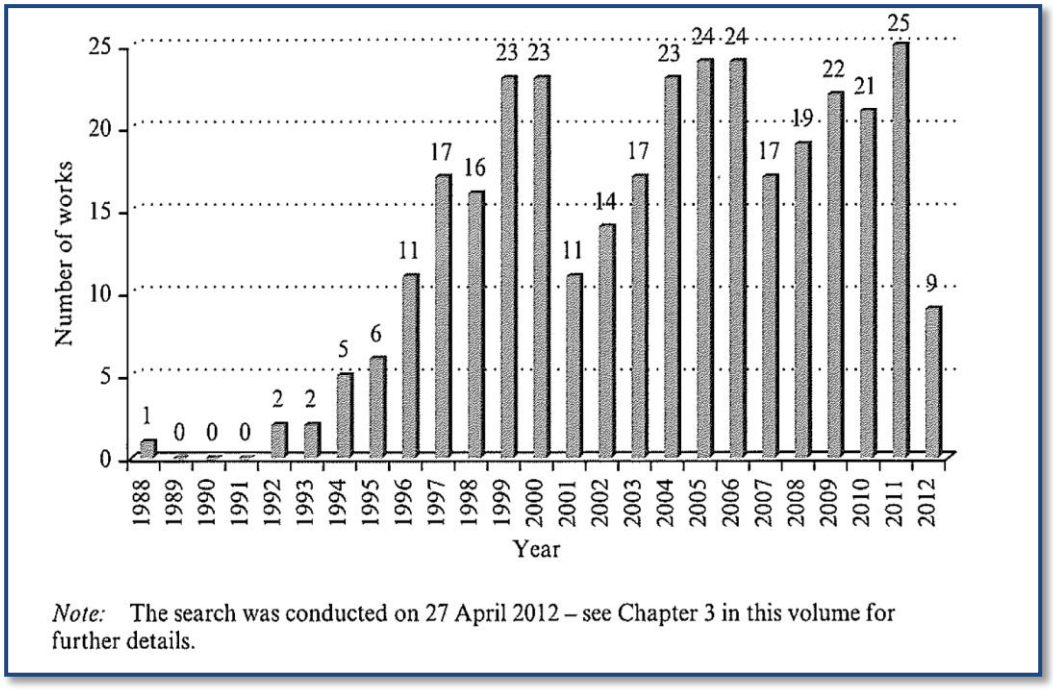

Figure 2.3. Number of works (total 332), on the learning organization idea in relation to a specific context, published between 1988 and 2012 (Örtenblad, 2013, p.10).

This body of empirical research has developed in recent years across a variety of cultural and organisational contexts including manufacturing, universities, schools, military, police and the volunteer sector. In spite of a deficiency of learning organisation theoretical literature relating to the service context, a small body of empirical research that explores the public and service sectors has emerged. Örtenblad et al. (2013) conducted a meta-analysis of learning organisation research literature, and found a recent movement towards studying public and service sector organisations. They surmised that the reason for this bias was precisely because of the lack of theoretical modelling focusing on service and public sectors (Örtenblad et al., 2013, p. 38). Table 2.3 below illustrates how research studies now apply the learning organisation concept to a variety of organisational contexts: banking, libraries, schools, health, manufacturing, engineering and information systems (Örtenblad et al., 2013).

Table 2.3.

A Literature-Based Comparison of the Relevance of the Learning Organization Idea to Organizations within Various Industries (Örtenblad et al., 2013, p.39).

Industry	Are already LOs?	Recommended to become more of LO of the following aspect/ type (on a scale from 0 to 3 where – means 'not taken up', 0 is 'not recommended' and 3 is 'strongly recommended')				Number of studies
		LaW	OL	CfL	LS	
Schools	Very little, far too little	1	1	3	2	37
Libraries	Few of them	2	1	3	3	8
Healthcare organizations	Most are not, though few are	2	1	3	3	22
Manufacturing companies	Very few of them	2	1	2	3	12
Construction firms	Very little, far too little	1	3	3	2	8
Banks	Some	3	–	3	2	7
Engineering companies	Some	1	–	2	2	3
Information system/ software companies	Few of them; they are on the way	1	3	2	1	7

Note: LO = learning organization; LaW = learning at work; OL = organizational learning; CfL = climate for learning; LS = learning structure.

In order to advance the discipline, Örtenblad (2013, p.9; 2015) has proposed the development of learning organisation frameworks for each organisational context, and the development of empirical research within those contexts. The meta-analysis of learning organisation research by Örtenblad et al. (2013) (Table 2.3) found only eight studies of libraries as learning organisations. This research will be examined further in section 2.5 of this chapter. Table 2.3 demonstrates the openness of the learning organisation domain for empirical research in developing a theory about ensuring the relevance of the academic library to stakeholders.

2.4 DYNAMIC CAPABILITIES CONCEPT OF COMPETITIVE ADVANTAGE

2.4.1 Definition of Dynamic Capabilities

Another theory that is relevant to the research question is the dynamic capabilities concept of competitive advantage. This theory is important to this

research because it deals with the capability of an organisation to maintain its competitiveness in a dynamic changing environment. The dynamic capabilities concept of competitive advantage emerged from strategic management literature, but incorporated a variety of literatures including organisational learning and human resources management (Teece et al., 1997, p. 510). According to Teece (2007, p. 1320), the way in which internal processes are managed is core to business success Teece (2007, p. 1320). The dynamic capabilities conceptual framework incorporates all aspects of learning organisation practice, but ensures that an attitude of continuous learning is embedded through an intentional executive management strategy.

According to dynamic capabilities theory, businesses can achieve long-term sustainability if they possess certain capabilities. Teece et al. (1997, p. 515) define the term *dynamic* as the ability to renew competences in response to the changing environment. They also define *capabilities* as:

> …strategic management in appropriately adapting, integrating, and reconfiguring internal and external organizational skills, resources, and functional competences to match the requirements of a changing environment. (Teece et al., 1997, p. 515)

According to dynamic capabilities theory, the capabilities an organisation requires to match the changing environment are: sensing and shaping opportunities and threats; seizing those opportunities; and finally, moving to enhance, protect and, if necessary to restructure the organisation's intangible and tangible assets (Teece, 2007, p. 1319). According to Eisenhardt and Martin (2000, p. 1106) dynamic capabilities consist of *microfoundations* of structured processes like product development and alliances. These capabilities are underpinned by a solid stream of empirical research, and therefore lend themselves to "best practice" (Eisenhardt & Martin, 2000, p. 1108).

2.4.2 The Executive Leader and Dynamic Capabilities

If a learning organisation requires leaders who are always learning, dynamic capabilities, according to Teece (2007, p.1346), also require an entrepreneurial style of management, which is constantly seeking to sustain competitive advantage through constant improvement and innovation.

2.4.3 Sensing and Shaping Opportunities and Threats

The dynamic capability of *sensing and shaping opportunities and threats* requires the enterprise to recognise a problem and to understand current trends in markets, new technologies, consumer needs, political events and legislative requirements (Teece, 2007, p. 1322). The sensing capability (Teece, 2007), involves a formal research and development process, but also includes surveying clients, noting complaints and suggestions, observing innovations of outside suppliers, collaborating with other organisations, and incorporating an analytical framework into decision-making strategies and processes (Teece, 2007, p. 1324).

In recent years, this theory has evolved further in the service organisation domain. A number of authors argue that innovation in a service organisation requires close engagement with customers (Carbonell & Rodriguez-Escudero, 2014; Kindström, Kowalkowski, & Sandberg, 2013). This assertion is present in the literature about service innovation (Agarwal, Selen, Roos, & Green, 2015; Ordanini & Parasuraman, 2011; Wang, Zhao, & Voss, 2016). It derives from the body of research of Parasuraman (2004, p. 47), who argued that customers have a zone of tolerance for service, which falls between a desired and a minimum level of service. If the service falls below the minimum level, customers will look elsewhere for their service needs to be met (Parasuraman, 2004, p. 47).

The sensing capability is similar to the learning organisation process of *knowledge management* (see Table 2.2), which consists of processes such as *establishing systems to capture and share learning*, and *connecting the organisation with its environment* (Watkins & Marsick, 1993; Marsick & Watkins, 1999).

Figure 2.4 below illustrates the microfoundation processes required for this capability. This means embedding processes of scanning and interpreting in four areas: directing and selecting new technologies through research and development departments, or through the employment of creative individuals (Teece, 2007, p.1323) ; surveying customer needs (Teece, 2007, p.1324); tapping supplier and complementor innovations in order to increase the level of service (Teece, 2007, p.1324); and collaboration with educational and complementary institutions, in order to tap developments in law, science, technology, and government policy (Teece, 2007, p.1325).

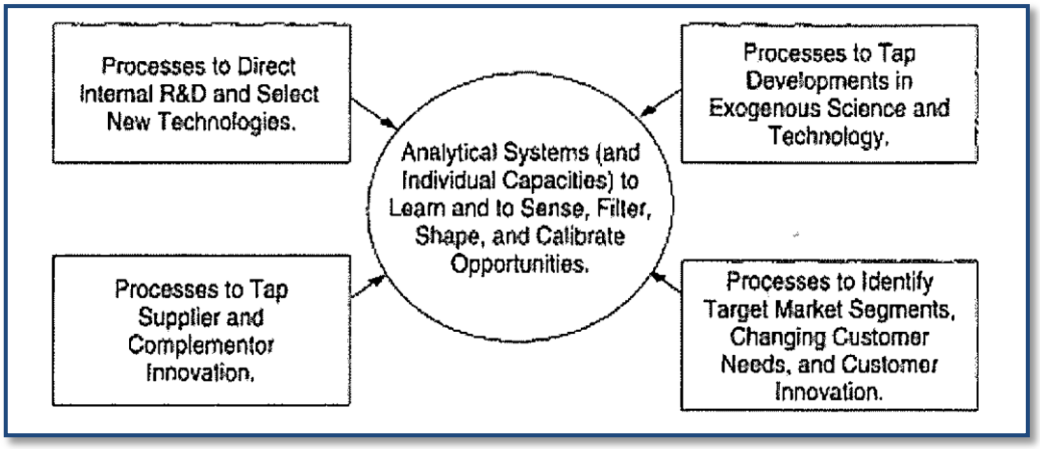

Figure 2.4. Elements of an ecosystem framework for 'sensing market and technological opportunities' (Teece, 2007, p.1326)

2.4.4 Seizing Opportunities

The *seizing opportunities* capability requires the executive management team to synthesise information, and then embed it into the organisational planning and processes of middle management (Teece, 2007, p.1323). This entails sensing until a dominant technology or system emerges, and then investing heavily in its introduction (Teece, 2007, p.1326). This capability includes processes which enable strategic decision making and execution of these decisions. The responsibility for seizing lies with the executive leader. According to Teece (2007) "an important class of dynamic capabilities lies around a manager's ability to override certain 'dysfunctional' features of established decision rules and resource allocation processes" (p.1327). This capability is also similar to the learning organisation process of *vision* (see Table 2.2) and *empowering people towards a collective vision* (Watkins & Marsick, 1993; Marsick & Watkins, 1999).

Figure 2.5 below explains the four microfoundations, or processes required for this capability. Firstly, the organisation must adopt a business model that will promote new strategies or investments (Teece, 2007, p.1327). This is necessary to "select the appropriate technologies and features, identify targeted market segments, define the structure of the value chain, and estimate the cost structure and profit potential" (Teece, 2007, p.1329). Secondly, selecting enterprise boundaries ensures that the innovation benefits the organisation rather than its competitors (Teece, 2007, p.1331). Thirdly, selecting decision-making protocols helps managers to operate in

an environment where they are free to offer honest opinions. This also helps to combat bias, inertia and preference for the status quo (Teece, 2007, p.1333). Finally, the executive leader builds loyalty and commitment to the vision by creating a positive organisational culture (Teece, 2007, p.1334).

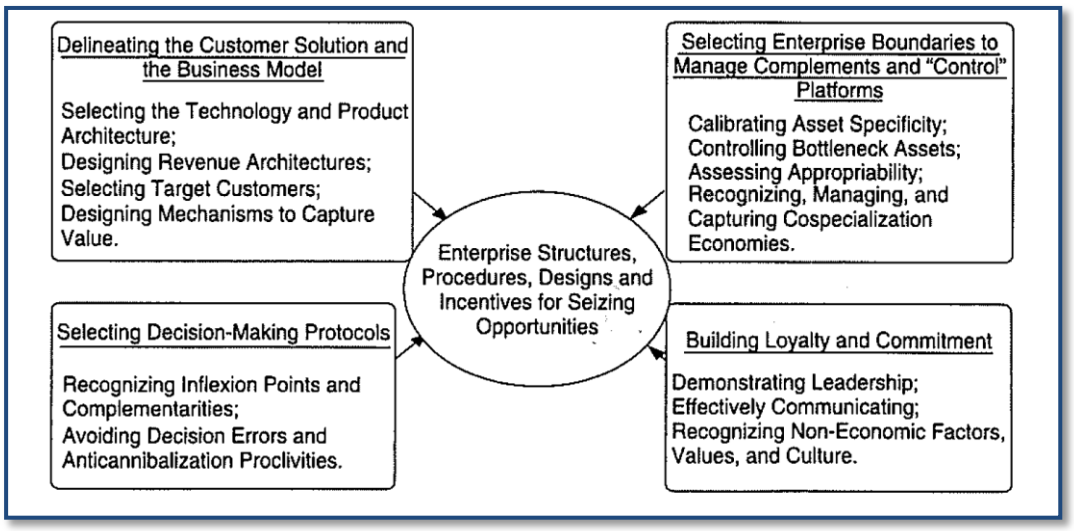

Figure 2.5. Strategic decision skills/execution (Teece, 2007, p.1334)

2.4.5 Managing Threats and Reconfiguration

The third dynamic capability of *managing threats and reconfiguration* involves avoiding path-dependency through reconfiguring assets and routines. Organisational structure must also be configured so that management are not isolated from market realities Teece (2007, p. 1335). Once again, this parallels the learning organisation concepts of *knowledge management*, and *knowledge sharing* (see Table 2.2), which entails *encouraging collaboration and team learning* (Marsick & Watkins, 1999; Watkins & Marsick, 1993) and *establishing systems to capture and share learning* (Marsick & Watkins, 1999; Watkins & Marsick, 1993).

Figure 2.6 shows the four microfoundations of this capability: decentralisation and near decomposability; cospecialisation; knowledge management; and governance. The first microfoundation means that the decentralisation of day-to-day decision-making frees executive leaders to engage in strategic decision making (Teece, 2007, p. 1336). Decomposability gives organisational units considerable autonomy while also remaining connected to the organisation through co-ordinated forums (Teece, 2007, p. 1337). The second microfoundation of managing

cospecialisation involves alliance building where specialised products and services can be combined with another to provide a new product (Teece, 2007, p. 1338). The microfoundation of knowledge management includes encouraging learning throughout the organisation, knowledge sharing, and protecting knowledge (Teece, 2007, p. 1339). Finally, attention to governance ensures protection from financial and strategic misconduct. Human resources management becomes important in attracting, rewarding and retaining talented staff and developing a strong corporate culture (Teece, 2007, p. 1340).

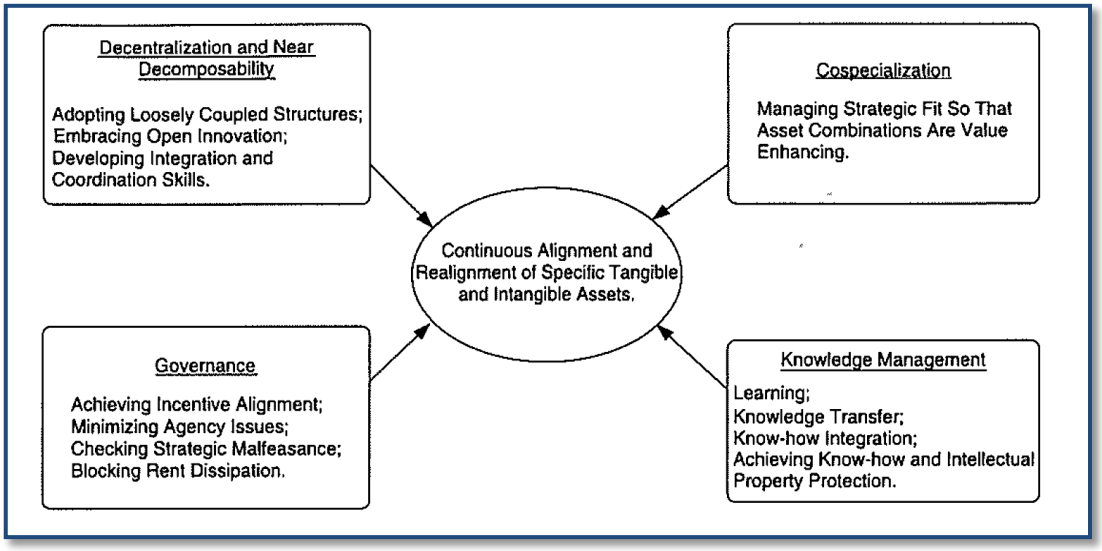

Figure 2.6. Combination, reconfiguration, and asset protection skills (Teece, 2007, p.1340)

In addition to this, dynamic capabilities authors have explored the capabilities required for the service sector. In particular, they have emphasised the importance of understanding clients and their needs (den Hertog, van der Aa, & de Jong, 2010, p. 499; Kindström et al., 2013).

2.5 THE RECENT LIS RESEARCH ENVIRONMENT

Study of the academic library as a learning organisation is an emerging field of research and there is little theoretical literature or empirical research that investigates libraries as learning organisations (Hallam, Hiskens, & Ong, 2014, p. 85). The meta-analysis of learning organisation literature by Örtenblad et al. (2013, p.39) identified only eight research studies of libraries as learning organisations. Indeed both Rowley

(1997) and Örtenblad (2015) suggest that current learning organisation frameworks may not be suitable for the library context.

There is also little discussion in LIS literature of the narrower, related area of innovation strategy (Rowley, 2011, p. 252), although Jantz (2015) contributes by generating an empirical model of factors that determine organisational innovation in research libraries.

A large number of research studies analyse the individual attributes and practices in academic libraries that may be seen as learning organisation processes or dynamic capabilities microfoundations. These studies indicate the areas where these processes/capabilities are generally performed well in academic libraries, or where there is room for improvement.

The research into learning organisation attributes of academic libraries is synthesised with dynamic capabilities and is presented in sections 2.5.1 to 2.5.4 under the category headings presented in Table 2.2: knowledge management, knowledge sharing, learning culture and vision.

2.5.1 Knowledge Management

The learning organisation attribute of *knowledge management* (see Table 2.2) or the *sensing* capability (Teece, 2007) are well covered by research demonstrating that academic libraries have sought to become user-driven, improving their services through consultation with users. For example, recent research demonstrates that academic libraries have engaged in acquiring knowledge about their stakeholders through focus groups (Appleton et al., 2011, p. 347) or through the use of survey instruments such as SERVQUAL™ (Hossain & Islam, 2012; Kaur, 2010; Zahid, 2011).

Ralph and Tijerino (2009, p. 335) quote a number of research studies that investigated the use of knowledge management tools in academic libraries and concluded that cataloguers rely heavily upon these tools, while they are deemed impractical in a reference environment. This finding is also supported by the meta-analysis by Örtenblad et al. (2013, p.39), which found that libraries perform strongly in formal approaches to learning and knowledge management, embedding new knowledge into routines and standard operating procedures.

2.5.2 Knowledge Sharing

The learning organisation attribute of *knowledge sharing* (see Table 2.2) or the *seizing* capability (Teece, 2007) involves formal and informal learning across the university library. According to Jain and Mutula (2008, p. 11), this also means providing accessible digital resources to all stakeholders and a digital repository resource for faculty. The research literature in this area of library practice is rich, and a recent study by Shoid and Kassim (2013) reflects the findings that, in general, academic libraries practice knowledge management and sharing well. This is because the professional requirement of qualifications, professional membership and continuing professional development ensures learning is occurring and knowledge is shared.

2.5.3 Learning Culture

A learning culture is a culture that encourages systems thinking and the empowerment of staff members through a decentralised organisational structure (see Table 2.2). Several authors argue that systems thinking is a necessary factor for academic libraries (Bryson, 2011, p. 10; Jantz, 2012b, p. 5; Somerville, 2015). A case study by Davis and Somerville (2006) of California State Polytechnic University reveals that systems thinking can help the academic library to align its library outcomes with the university's vision, with the particular purpose of improving its information literacy strategies. Another study of the University of Arizona library demonstrates how systems thinking has created team structures for collaborative learning and participative decision making (Phipps, 2004). Bryson (2011, p. 10) asserts that constant restructuring will avert complacency within the organisation and will encourage staff to think ahead to the next innovation. A number of research studies have also examined systems thinking, or related areas of leadership and strategic management, as applied to the academic library (Casey, 2011; Strecker, 2010).

In recent years the informed systems approach, produced over a number of years through the work of Somerville and Howard (2010), Somerville and Mirijamdotter (2014), and Somerville (2015), has applied systems thinking to the academic library setting.

The learning organisation attribute of *learning culture* (see Table 2.2) includes Watkins and Marsick's (1993) concept of *empowering people towards a collective vision through decentralising structure.* This requires the organisation to examine and question its structures and decision-making processes in order to improve its performance. The dynamic capability of managing threats and reconfiguration often requires restructuring, a flattening of structure, or a participative approach, so that management are not isolated from market realities (Teece, 2007, p. 1335). This means decentralisation of decision making to lower levels, which frees upper levels of management to engage in strategic decision making (Teece, 2007, p. 1336). In short, this requires a team structure.

2.5.4 Vision

The organisation's *vision* (see Table 2.2) captures the core competence of the organisation and is the basis of all executive level decision making concerning innovation, new markets and strategic planning. An organisation's vision is encapsulated in its vision statement, along with purpose or mission statements. Marsick and Watkins (1999, p. 11) define this as creating strategic leadership for learning. The leader is responsible for the development of an innovation strategy (Watkins & Marsick, 1993, p. 166). This view is supported by Teece et al. (1997, p. 513), who emphasise that competitive advantage lies in an organisation's focus on the core competence of "difficult-to-imitate resources". Teece's *seizing* capability requires the organisation to constantly focus upon its core competence as the basis for its decision making, and therefore ensure that decisions are based upon its product/services being beneficial to its customers, potentially opening up new markets, and being difficult to imitate. According to Jurow (1996, p. 301), the academic library must identify its core competence because this will impact future endeavours. For example, if the library decides to allocate its acquisitions budget to interlibrary loans, it will be hard to regain the expertise and systems in future (Jurow, 1996, p. 301).

The importance of vision is understood by Hallam et al. (2014) in the *National and State Libraries Australasia (NSLA) Learning Organisation Maturity Model*. This model includes vision and culture as an important element in measuring a learning organisation. However, this work does not address the academic library context. A survey of academic library literature shows that the move towards aligning library

vision with university vision means questioning long-held assumptions about values and organisational structures and thinking about new approaches to the role of the library and its services (Davis & Somerville, 2006, p. 137).

2.5.5 Academic Libraries as Learning Organisations – Studies of the Three Levels

Several research studies examine the three learning organisation levels in academic libraries. Fowler's 1998 case study examines the mechanisms that enable learning to facilitate innovation. Fowler's research studied and compared the responses of teams and departments in an academic library and found that while team learning contributed to shared vision, there was little understanding of the function of shared vision (Fowler, 1998, p. 228).

Giesecke and McNeil (2004) describe a learning organisation program begun at the University of Nebraska-Lincoln Libraries in 1996 that found the library had developed a vision, but had not yet developed systems thinking some eight years later. Another case study of Kuopio University Library by Saarti and Juntunen (2011) describes the library's systematic approach to creating a learning organisation through concentrating on staff development. The studies of Fowler (1998) and Giesecke and McNeil (2004) are old, and do not reflect current realities.

2.5.6 Non-Western Academic Libraries as Learning Organisations

A number of case studies examine non-Western academic libraries as learning organisations. The research of Tan siew chye and Higgins (2002, p. 173), conducted at Nanyang Technological University, found that the library rated highly in their customer service, understanding of the need for constant learning and change, but were weak in shared vision, trust, perceived bureaucracy, employee participation, leadership and forgiving climate. This study showed a marked learning organisation weakness at the library's leadership level. The authors noted that the Asian cultural mindset inhibited employees from participating in knowledge sharing or being proactive in decision making (Tan siew chye & Higgins, 2002, p. 174).

A conference paper by Su (2006) describes a quantitative survey of 145 librarians in five Taiwanese university libraries in 2005. The recommendations that emerged from this research centred upon the responsibility of the executive leaders in being committed to the concepts of the learning organisation, empowering staff

and promoting learning (Su, 2006, p.250). This paper has a solid empirical basis, but does not make recommendations about how academic library leaders can establish these processes.

An empirical study was conducted into the perceptions of university librarians of team level learning in the Klang Valley of Malaysia (Kassim & Nor, 2007), using a questionnaire adapted from Watkins and Marsick's (1996) *Dimensions of a Learning Organisation Questionnaire (DLOQ).*This quantitative study found that while team learning was occurring and had positive benefits for staff, there was a strong perception that team recommendations were ignored by management and achievement was not rewarded. The overall conclusion was that team learning was not occurring in the academic libraries of the Klang Valley (Kassim & Nor, 2007, p. 63).

The study into Yemeni university libraries conducted by Abdullah and Kassim (2008, p. 85) also used the DLOQ questionnaire. This quantitative study examined the perceptions of senior and middle level librarians in private and public universities in order to ascertain differences in learning organisation culture. The results demonstrated that these libraries could not be seen to be learning organisations and that leadership did not intentionally build a learning climate.

The overwhelming theme that emerges from these studies is that executive leaders in non-Western cultures are deficient in producing an environment for learning. The findings also suggest that organisations may be hampered by cultural factors that inhibit the development of certain learning organisation attributes. This view is also supported by Örtenblad et al. (2013, p.38) who state that studies conducted in non-Western contexts often take into account cultural factors. Örtenblad et al. (2013, p.39) suggest that this is because the learning organisation is seen to be an idea constructed in a Western manufacturing context.

2.5.7 Australasian Academic Libraries as Learning Organisations

The study by Örtenblad et al. (2013, p.39) synthesised learning organisation studies, and, arranging them according to Örtenblad's learning organisation model (2004), found that libraries require improvement in the areas of learning structure and climate for learning (Örtenblad et al., 2013, p.39). A journal article by Hallam et al. (2014) describes the development of a learning organisation maturity model for

the National and State Libraries Australasia (NSLA). The NSLA Learning Organisation Maturity Model includes three elements: Learning and Learners; Vision and Culture; and Management and Structure. This model also stresses the importance of the library's engagement with its external stakeholders (its clients). This maturity model provides a continuum which can be used as a measurement tool for national and state libraries to assess their development as a learning organisation, but it does not apply to the academic library.

Leong and Anderson (2012) published a descriptive case study about the actions taken at Royal Melbourne Institute of Technology (RMIT), to enhance employee engagement for innovation. Another paper by Leong (2014) described in greater detail the structured approach taken by RMIT in developing a learning culture that is aligned to the university's strategic plan. While this paper describes the great lengths taken in developing inductions, professional development programs, the introduction of various groups designed to encourage professional publication output and innovation, and developing a team model to encourage teamwork, it does not cover the learning actions of the university librarian.

Renner et al. (2014) describe the use of learning organisation concepts to implement change in the library of the University of Western Australia. This study used the Garvin et al. (2008) Learning Organisation Survey (LOS) to measure whether the implementation of a student IT support model was creating a learning organisation. Renner et al. (2014) describe the implementation of the new IT support model, measured the learning of staff, and how the new scheme rated with students. This article explores the implementation of one process which required new learning, but it does not investigate the experience or actions of the leader in this process.

A paper by McBain, Culshaw, and Walkley Hall (2013) and follow-up research by Hall and McBain (2014) examine the impact of the establishment of a Research Working Group (RWG) at Flinders University Library. McBain et al. (2013) state that the RWG group was established to produce librarians with experience in the research process, allowing them to engage more effectively with the university's research culture (p.449). The purpose of the group was to develop staff skills in research, encourage analysis and investigation of the library's services and resources, and to encourage professional engagement through presentations and the publication of research results (Hall & McBain, 2014, p. 130). While the

University Librarian was the instigator of the process (McBain et al., 2013, p. 452), yet again, this is a case study that describes and evaluates a single initiative in a single university library.

2.5.8 Research into Academic Libraries using the Dynamic Capabilities Framework

To date, only one study exists that explores the strategic repositioning of an academic library using the dynamic capability framework (Chan & Soong, 2011). This is a case study of the reorganisation of the library of the Hong Kong University of Science and Technology. It discusses the dynamic capabilities of sensing, restructuring of the decision-making processes, and finally ensuring the continuous nature of this process through ensuring learning, team communication, and knowledge management are occurring. This case study affirms the usefulness of the dynamic capabilities framework in an academic library, but it does not provide an argument for the usefulness of this theory based upon wider empirical research.

2.6 THE RESEARCH GAP

In spite of these emerging efforts to stimulate the cultures, structures and strategies that enable libraries to maintain and extend their relevance to their stakeholders, there is no literature that provides a structured framework of practices and processes based upon wide empirical research.

Sections 2.5.1 to 2.5.4 illustrate the research into the learning organisation attributes and processes involved in achieving the academic library's relevance in the current information ecology. Section 2.5.5 examines the case studies of Fowler (1998), Giesecke and McNeil (2004), and Saarti and Juntunen (2011), and finds an overview of three levels of learning, rather than an emphasis upon the actions of the University Librarian. Section 2.5.6 explores recent learning organisation research in non-Western academic library settings. Once again, these are case studies that do not focus upon the role of the executive leader of the library.

Section 2.5.7 examines the recent research literature into Australian academic libraries as learning organisations. The recent works of Leong and Anderson (2012) and Leong (2014), Renner et al. (2014), and McBain et al. (2013) and Hall and McBain (2014) do not examine the experience and actions of the University Librarian in instituting the processes for ensuring the library's relevance. As single

case studies, they do not have the broader empirical basis for the findings to be transferred to other academic libraries. These research studies tend to study a single instance of innovation, or learning process for particular library teams or individuals.

Section 2.5.8 illustrates that only one case study examines an academic library from a dynamic capabilities lens. Once again, a single case study does not provide a significant empirical basis for a theory about the processes which enable the university library to ensure its relevance to its stakeholders.

In addition to this, the actions of the University Librarian in instigating these processes remain largely unexamined. Indeed, only one research study examines the perceived role of the University Librarian or Library Director in instigating innovation. Jantz (2012b) interviewed six University Librarians, and his findings appeared to create more questions than it answered. The work of Jantz applied the lens of leadership style and organisational change to examine how University Librarians perceive innovation. Jantz (2012b) concedes that:

> Most of the respondents' comments related to their roles as managers, and establishing processes that might facilitate innovation in the organization. But there was little discussion or introspection about how they might undertake a leadership role to facilitate major change (p.10).

Jantz (2012b) also proposes some questions for further exploration. Significantly, one of those questions is "What are the important new types of knowledge – an important antecedent of innovation – that are needed, and how can this knowledge be developed?" (p. 10).

Therefore, a clear research gap exists concerning the role of the University Librarian in ensuring the relevance of the university library. The recent research of Jantz (2012b) demonstrates that University Librarians are unaware of how their leadership role can facilitate major changes that would ensure ongoing innovation and therefore relevance to stakeholders. Jantz (2012b) also suggests that further study of the knowledge required for innovation in university libraries is necessary. Once again, this is another factor that is examined by this research study.

2.7 CONCLUSION

This literature review has identified the need for the university library to transform itself to face the current competition from open access information

sources. It has also identified the need for the CEO of the library, the University Librarian or Library Director to make changes that will facilitate its ability to renew its structures, strategies, culture and competences. This chapter has explained why this research is necessary by exploring the barriers that prevent university libraries from maintaining their relevance to their stakeholders.

The literature review has identified two theoretical frameworks that enable organisations to explore their current and future environment and make the changes that enable them to survive and thrive: learning organisation theory and the dynamic capabilities concept of competitive advantage. The review has discovered that some research has examined academic library operations through the learning organisation and dynamic capabilities lens, but these have overwhelmingly been individual case studies. Moreover, none of these studies have focused upon the role and actions of the leader in instigating such organisational change. Therefore, this literature review has identified a broad research gap that justifies the need for this research.

This chapter has also fulfilled the requirements of a constructivist grounded theory by providing a literature review that reflects a very broad management scope (Charmaz, 2014; Glaser, 1978, 1992). The knowledge of learning organisation and dynamic capabilities theories influences the development of the interview protocol, serving as a starting point for questioning (Charmaz, 2014, p. 31) (see section 4.1 of Chapter Four). The discussion chapter (Chapter Six) provides an in-depth literature review that explores the specific categories of the substantive grounded theory that is the outcome of the research. This in-depth literature review relates the grounded theory categories to extant management theory and LIS literature.

The next chapter (Chapter Three) provides an overview of the methodology used in this research. Chapter Three explains the philosophical background to qualitative and interpretive research, and presents a rationale for constructivist grounded theory as the method used for this study.

Chapter 3: Research Methodology

Chapter Three describes the overall methodology of this research and examines its underlying logic. This chapter explains why the interpretive paradigm is the best philosophical foundation for this research and presents a rationale for constructivist grounded theory as the research method.

This chapter is presented in the following way:

- Introduction to the overall research methodology (3.1)
- The research paradigm (3.2)
- Grounded theory method (3.3)
- Constructivist grounded theory (3.4)
- Conclusion (3.5)

Section 3.1 introduces the overall research methodology. Section 3.2 outlines the philosophical assumptions that underlie paradigms and then explains interpretivism, contrasting it with positivism and post-positivism. The reasons why a grounded theory method might be used and its basic procedures are explored in section 3.3. Section 3.4 explains how constructivist grounded theory differs from the two prior versions and explores its theoretical foundations.

3.1 INTRODUCTION TO THE RESEARCH METHODOLOGY

The term *methodology* refers to the overall approach to a research study. According to Gable (2007), methodology "refers to the rationale and the philosophical assumptions that underpin a particular study." Likewise, Cecez-Kecmanovic and Kennan (2013) observe that a research methodology is:

> … an overall logic of inquiry involving philosophical assumptions behind an inquiry, the strategy of conducting research such as research design and selection and adoption of research methods and techniques as well as arguments for knowledge construction and justification (p. 113).

This research operates within an interpretivist paradigm or world view, and the reasons for this are explained in section 3.2.3 of this chapter. The overall

methodology chosen for this research is a qualitative mode of inquiry. The method of research, including the analysis, is a constructivist grounded theory (see section 3.5), and the means of data collection is through semi-structured interviews (see sections 4.3.5 and 4.3.7). The Venn diagram below (Figure 3.1) illustrates how the methodological components fit as subsets of each other within the research design.

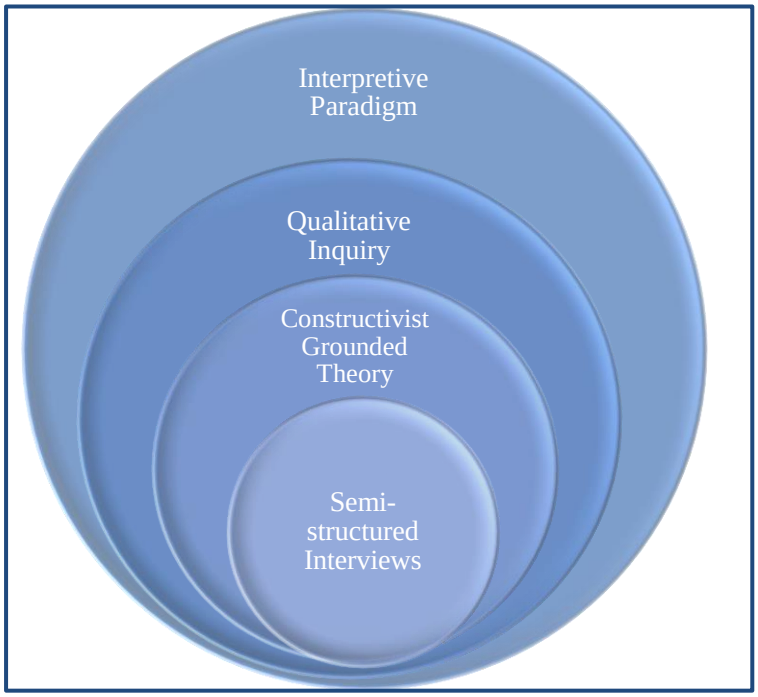

Figure 3.1 Research design for *How the University Librarian Ensures the Relevance of the Library to Stakeholders: A Constructivist Grounded Theory*.

3.2 THE RESEARCH PARADIGM

A *paradigm* is a set of philosophical assumptions that become the foundation for the overall research design, which includes the selection of research methods and techniques. Several authors (Cecez-Kecmanovic & Kennan, 2013, p. 118; Pickard, 2013, p. xviii) define a paradigm as the *world view* that is shared by members or researchers of a particular field or scientific community, which then guides the research activity and its outputs. Paradigms make assumptions based upon four aspects:

- Ontology – the nature and existence of social reality
- Epistemology – the nature of knowledge and the ways of knowing
- the logic of scientific explanation

- ethics and claims about values and normative reasoning concerned with what 'ought' to be (Cecez-Kecmanovic & Kennan, 2013, p. 118).

The number of research paradigms has increased over many years within the research landscape. Geertz (2000, p. 19) and Denzin and Lincoln (2011, p. 3) called this "genre blurring", and Lincoln, Lynham, and Guba (2011) agreed that this prophecy was "rapidly being fulfilled"(p. 97). Indeed, the paradigmatic environment has become so crowded that there is much disagreement among research authors about umbrella terms and the overlapping of categories and contexts (Denzin & Lincoln, 2011, p. 3; Flick, 2009, p. 16; Williamson, 2013b, p. 9). For this reason, it is important for the researcher to understand the foundational philosophical assumptions that direct the choices of research method and technique.

The constructivist grounded theory method of research is situated within the *interpretive* paradigm. *Interpretivism* is also known as social constructivism (Creswell, 2013, p. 24; Lincoln et al., 2011) and it aims to interpret participants views and the many meanings they ascribe to certain situations (Creswell, 2013, p. 24). The broad nature of questioning allows the participant to construct the meaning of a situation, which is interpreted by the researcher while taking account of interactions between people, time, and cultural contexts (Creswell, 2013, p. 25).

In order to explain why the constructivist grounded theory method has interpretive assumptions about the world, it is important to contrast it with two historically preceding paradigms: *positivist* and *post-positivist.*

3.2.1 Positivism

Positivist research is called traditional or scientific research because it argues that social science research should follow the same logic as pursued in the scientific or natural domain (Cecez-Kecmanovic & Kennan, 2013, p. 120; Williamson, 2013b, p. 7). The purpose of positivist research is to predict and then control phenomena through social reconstruction (Guba, 1990, p. 19; Pickard, 2013, p. 9). The research strives to achieve a general theory, or generalizability, by examining specifics, and then applying it to all occurrences (Pickard, 2013, p. 9). The ontological assumption of positivism is realism, which argues that objective truth exists independently of humans. The positivist paradigm argues that social facts function according to

immutable laws, strongly resisting metaphysical interpretations of it (Cecez-Kecmanovic & Kennan, 2013, p. 507; Pickard, 2013, p. 9). Positivist objectivist/dualist epistemology requires the researcher to be objective, and *values free* and that the researcher and subject can exist without influencing each other (Cecez-Kecmanovic & Kennan, 2013, p. 121; Guba, 1990, p. 20; Pickard, 2013, p. 9). Positivist methodology uses deductive logic that involves the construction of a hypothesis from a literature review, which is then empirically tested using quantitative methods (Cecez-Kecmanovic & Kennan, 2013, p. 121; Denzin & Lincoln, 2011, p. 9; Pickard, 2013, p. 9).

3.2.2 Post-Positivism

Post-positivism represented a shift from the certainties of a deterministic approach to social science to a more tentative view that research is about discovery (Pickard, 2013, p. 10). The purpose of the research is still social reconstruction, but post-positivism allows a hypothesis that aims to disprove the existence of phenomenon (Pickard, 2013, p. 11). Like positivists, post-positivists believe truth exists, but is never completely perceived because of human error, thus requiring the researcher to be critical of their own research (Guba, 1990, p. 20; Pickard, 2013, p. 10; Williamson, 2013b, p. 8). The epistemology is a modified *dualist/objectivist* approach which recognises that the researcher cannot be completely objective and must interpret findings (Pickard, 2013, p. 11). Methodologically, post-positivism is committed to developing a hypothesis which is tested using as many sources of data as possible (both quantitative and qualitative) in order to achieve reliability (Guba, 1990, p. 21; Pickard, 2013, p. 11; Williamson, 2013b, p. 8).

3.2.3 Rationale for the Interpretive Paradigm

The rationale for employing an interpretive approach in this research is explained by exploring five underlying assumptions of the paradigm: purpose, ontology, epistemology, axiology, and method.

Purpose: Building a Mid-Range Theory

The purpose of an interpretive approach diverges significantly from that of a positivist approach. Positivism is *nomothetic* in its purpose, proposing to discover generalizable laws which can help to control and reconstruct the social world (Bates, 2005, p. 9). Interpretivism, in contrast, is *ideographic* in its purpose, aiming to

describe and understand the unique experiences and processes of the individual (Bates, 2005, p. 9; Cecez-Kecmanovic & Kennan, 2013, p. 123). Bates (2005) claims that nomothetic and ideographic research approaches are: "the most fundamental orienting strategies of all" (p. 8). The ideographic nature of an interpretive worldview matches the research question of this study and its focus upon the experiences and actions of the University Librarian.

The purpose of this research is also to produce a midrange theory (Gregor, 2006, p. 616; Swanson & Chermack, 2013, p. 21) that explains processes within a bounded context. The theory is applicable to similar academic library settings rather than to other organisational or library settings.

Ontology: Socially Constructed Reality

The relativist *ontology* of interpretivism harmonises with this research. Relativist ontology recognises that the individual experience of the human being enables the construction of personal realities, and therefore recognises the existence of the multiple realities of human beings (Lincoln & Guba, 1985, p. 73; Lincoln et al., 2011, p. 102). Interpretivism understands the values and feelings of participants in relation to the phenomena being studied, and views the world as socially constructed (Cecez-Kecmanovic & Kennan, 2013, p. 121; Pickard, 2013, p. 12; Williamson, 2013b, p. 9). Interpretivism also encompasses an awareness of time and context (Pickard, 2013, p. 12; Williamson, 2013b, p. 9).

This research asks "how can the University Librarian ensure the relevance of the academic library to stakeholders in the face of competition from open access information sources?" Therefore it examines the experience of the University Librarian (the individual) in ensuring the library's relevance within complex social processes (the complex academic environment at the time of competitive threats from open access information sources). The *how*, or, description of the process part of this research question is very important in placing the research within the interpretive paradigm (Denzin & Lincoln, 2011, p. 8). The focus of this research upon explaining processes contrasts entirely with the positivist paradigms, whose "quantitative studies emphasise the measurement and analysis of causal relationships between variables, not processes" (Denzin & Lincoln, 2011, p. 8).

Epistemology: Subjective

Thirdly, interpretivism has a subjectivist/transactional *epistemology*, which recognises that the researcher and subject are constantly interacting (Pickard, 2013, p. 12). Because interpretivist researchers are conscious of their presence in shaping knowledge, they are constantly checking that they are recording participants' views accurately (Lincoln et al., 2011, p. 103; Williamson, 2013b, p. 10) and aim to include as much evidence as possible to enable understanding of the research (Cecez-Kecmanovic & Kennan, 2013, p. 123; Pickard, 2013, p. 12). In contrast with the positivist orientation towards analysis of numerical data, the qualitative approach of interpretivism examines "rich", or "thick" detailed descriptions of the phenomena being studied (Denzin & Lincoln, 2011, p. 9; Dey, 1993, p. 31).

Axiology: Acknowledging Bias

This approach also requires an axiology, or values structure, which requires the researcher to admit and declare their own values, and in doing so, seek to exclude those biases from the research analysis. Cutcliffe (2003, p. 140) argues that objectivity is unattainable in qualitative research because it is impossible for the researcher to achieve complete self-awareness. He claims that the researcher is unable to recognise certain aspects of self, and therefore retains an unconscious bias.

Cutcliffe explains this through the *Johari window* (Luft, 1984, p. 60) concept. Figure 3.2 (opposite) demonstrates the Johari window concept of the four selves of self-awareness. Quadrants one and three (the *open self* and the *hidden self*) become larger as self-awareness grows. The reason a researcher is unable to remain objective about the data is because of the existence of the *blind self* and the *unknown self*. Quadrant two, the blind self represents blindness to one's own behaviour, feelings and motivation (Luft, 1984, p. 60). Quadrant four, the unknown self is the behaviour, feelings and motivations that are unknown to the self and others (Luft, 1984, p. 61). These are only revealed under special conditions such as when under the influence of drugs and alcohol, during a high fever, or through therapy or gradual self-revelation (Luft, 1984, p. 69).

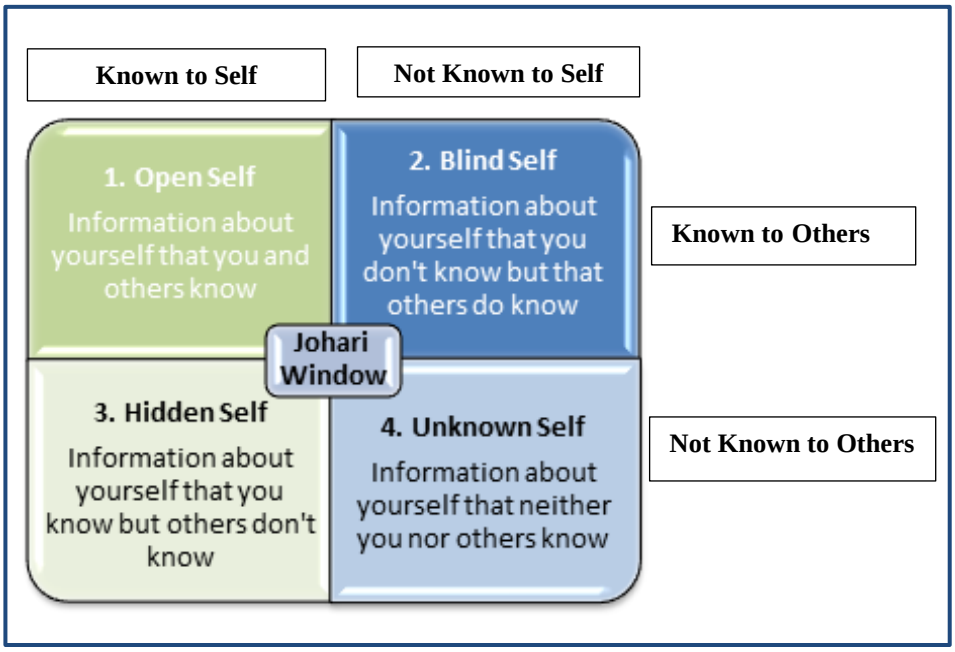

Figure 3.2. The Johari Window. Adapted by the author from DeVito (2009, p.56).

According to Dey (1993) "the researcher's own actions and perceptions therefore become part of the social interaction, and need to be observed and analysed as such" (p.110).

Logic: Inductive

Finally, interpretivist method uses *inductive* logic, whereby a general hypothesis is formulated from the data (Williamson, 2013b, p. 9). This is a reverse approach to the *deductive* logic of positivist paradigms. An inductive approach is suited to this research because its pragmatism means a hypothesis can be generated relatively quickly based upon the data. This is an important consideration because Denzin and Lincoln (2011, p. 9) state that paradigms using deductive logic are no longer able to cope with the rapid changes in the social world, and therefore a more pragmatic inductive approach is necessary.

In addition to this, interpretivism is characterised by naturalistic inquiry, where the research takes place in the natural setting (Williamson, 2013b, p. 9) and emphasises people and their actions in both context and time (Pickard, 2013, p. 13). Once again this harmonises with the research emphasis upon the actions of the University Librarian during the present time of open access. The research may therefore consider factors such as the leader's relationships with university administration, other leaders and staff. This contrasts with the positivist paradigms,

which focus upon an organisational context, requiring a case study method (Pickard, 2013, p. 101).

Interpretivist method relies heavily upon hermeneutics, or the interpretation of constructions and the resolution of difficulties through comparison and contrast (dialectics) (Lincoln et al., 2011, p. 103). This involves the analysis of the data in the process of assigning categories, and resolving problems by checking with participants that their reality is presented accurately. Figure 3.3 (below) illustrates how this research study matches with the underlying assumptions of the interpretivist paradigm.

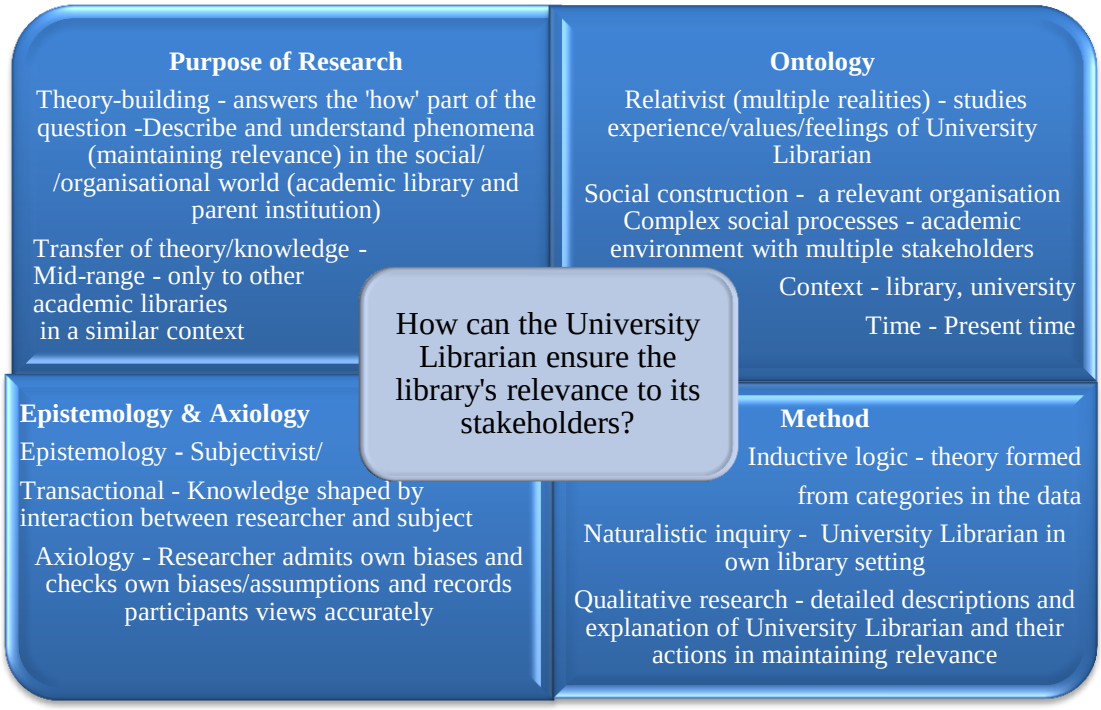

Figure 3.3. How this research question harmonises with the interpretive paradigm.

Section 3.2 and Figure 3.3 explain how the research question emphasises the action and experience of the University Librarian and that the resulting theory is likely to transfer only to similar organisational settings. Figure 3.3 also shows that the research question orients the research towards a method that recognises multiple realities, where the social processes are complex. This section (3.2) shows that the research question requires an interpretivist worldview. The method of interpretivism requires a qualitative form of inquiry that produces detailed descriptions.

Because this research aims to produce theory and because its ontology, epistemology, axiology and method are interpretivist, this researcher chose grounded

theory as its method of inquiry. Section 3.3 (following) discusses grounded theory purpose, its philosophical underpinnings, the rationale for its use in this research, and its historical background.

3.3 GROUNDED THEORY METHOD

Grounded theory method suited the purpose of this research because the research sought to generate a theory about the processes that the University Librarian undertakes that ensures the relevance of their libraries to stakeholders. Grounded theory is one of about 46 types of qualitative research methods that represent the variety of purposes and perspectives of researchers (Dey, 1993, p. 1; Tesch, 1990, p. 58).

As explained earlier (Section 3.2.3), the interpretive paradigm is a qualitative form of research that focuses upon the meanings present in the data, rather than upon numbers (Dey, 1993, p. 10). Qualitative research entails the collection of unstructured data, which must then be analysed (Dey, 1993, p. 16). The analysis begins with thorough description of the phenomenon being studied. However description alone is not enough and the analysis itself entails quantifying the number of times a particular meaningful concept emerges in the data (Dey, 1993, p. 20).

3.3.1 Purpose of Grounded Theory Method

Theory Building

The grounded theory research method was also chosen because it helps to develop theory when current theories are inadequate for the phenomenon being examined (Creswell, 2013, p. 48; Glaser & Strauss, 1967, p. 32; Morse et al., 2009, p. 16; Strauss, 1987, p. 5). The preliminary literature review (Chapter Two) showed that there was very little literature in the LIS field to explain the phenomenon.

Theory building, according to Swanson and Chermack (2013) "defines a specific realm of knowledge and explains how it works" (p. 1). There are many definitions of theory in the social sciences (Abend, 2008). However, this research uses the definition of Whetten (1989, p. 490), who argues that a complete theory consists of the following elements: *what*, *how*, *why*, and also *who*, *where* and *when*. *What* describes the relevant factors that explain the phenomena; *how* describes the relationships and causal links between the factors; and *why* explains the processes that underlie the factors and their causal links, establishing the theoretical concepts

that justify the inclusion of factors and proposals about the relationships (Whetten, 1989, p. 491).

Whetten (1989, p. 491) states that these three elements form the basis of a simple theory that describes and explains. This view is supported by Gregor (2006, p. 624) who also asserts that an explanatory theory is concerned with the how and why of phenomena, but does not make predictions. A study of Gregor's taxonomy of theory types in information systems research (Table 3.1) means that this research is most likely to produce a Type II theory: theory for explaining. Gregor (2006, p. 624) also observes that this type of theory fits the interpretivist paradigm, where the end product is the theory itself, rather than a testable theory that predicts future outcomes. Indeed, the grounded theory method employed in this research aims to produce an explanatory theory that brings about "abstract understanding" of the phenomena (Charmaz, 2014, p. 230).

Table 3.1.

A Taxonomy of Theory Types in Information Systems Research (Gregor, 2006, p. 620)

Theory Type	Distinguishing Attributes
I. Analysis	Says what it is. The theory does not extend beyond analysis and description. No causal relationships among phenomena are specified and no predictions are made
II. Explanation	Says what it is, how, why, when and where. The theory provides explanations but does not aim to predict with any precision. There are no testable propositions.
III. Prediction	Says what is and what will be. The theory provides predictions and has testable propositions and causal explanations.
IV. Explanation and prediction (EP)	Says what is, how, why, when, where and what will be. Provides predictions and has both testable propositions and causal explanations.
V. Design and action	Says how to do something. The theory gives explicit prescriptions (e.g. methods, techniques, principles of form and function) for constructing an artefact.

The addition of *who*, *where* and *when* set the boundaries, or context, of the theory, which then has implications for generalizability and range of the research (Whetten, 1989, p. 492). This research explores the experience of the University Librarian (*who*) of the academic library (where) at the present time of open access

data (*when*). Context is important to this research because it helps in understanding a phenomenon and the conditions that may affect or limit it (Whetten, 1989, p. 492).

Mid-Range Theory

One purpose of grounded theory is to produce a mid-range theory (Charmaz, 2011b; Glaser & Strauss, 1967). This sort of theory is not likely to be generalizable because the phenomenon relates to a particular area of inquiry, or is context bound (Glaser & Strauss, 1967, p. 93; Lincoln & Guba, 1985, p. 110; Swanson & Chermack, 2013, p. 21). Therefore, this research produces a mid-range theory, which, according to Merton (1968, p. 39) lies between a minor common sense procedure or "working hypothesis", and a grand theory.

Gregor (2006) echoes Merton in stating that mid-range theory is "moderately abstract, has limited scope, and can easily lead to testable hypotheses" (p. 616). Swanson and Chermack (2013) are more succinct in stating that "midrange theories apply to situations that do not attempt to establish universal laws but go beyond describing single instances of human activity" (p. 21). More importantly, a mid-range theory can only be an explanatory theory (Gregor, 2006). Because of its limitations of context, it cannot aim to predict as does a grand theory.

This research does not aim to produce a generalizable grand theory because its scope is limited to the context of academic libraries. As seen in Chapters Four and Five, the context is narrowed further to publicly funded libraries in two Western countries: Australia and the United States. The theory is unlikely to be generalizable to academic libraries in the non-Western context due to the differences between Western and non-Western cultures.

Substantive Theory

Kathy Charmaz (2014) uses the term *substantive* rather than the term *mid-range* to describe a constructivist grounded theory. The difference between the terms arises from the interpretive nature of constructivist grounded theory. According to Charmaz (2014), a substantive theory is "a theoretical *interpretation* [emphasis added] or explanation of a delimited problem in a particular area, such as family relationships, formal organizations, or education" (p. 344). Therefore, this study uses the term *substantive theory* to describe a mid-range theory.

3.3.2 Philosophical Considerations

Producing Useful Theory

Grounded theory method was also chosen because its pragmatist origins presuppose that theory can change according to social realities at any given time (Strauss & Corbin, 1998, p. 171; Strübing, 2007, p. 583). This allows the researcher to focus upon new fields of study that are constantly occurring in the dynamic context of organisational management (Locke, 2003, p. 96). While strategic management is a heavily researched area, grounded theory allows new organisational contexts to be studied. Thus, the fast-paced, high velocity technical environment of the academic library is an example of a fresh area for study.

The pragmatist origins of grounded theory also demand that theory arising from data must be useful (Strübing, 2007). Locke (2003) agrees that the theory that emerges from grounded theory research "is particularly adept at bridging theory and practice, providing employees and managers a way to identify and institute changes that might improve their situations" (p.96). This research seeks to be useful because it proposes to construct theory that formulates strategies for executive leaders to maintain and extend the relevance of the academic library.

3.3.3 Pragmatic Considerations

Relevance to the Field of Study

This research takes a multi-disciplinary approach, overlapping the disciplines of library and information studies (LIS), which is a sub-discipline of the information systems discipline, and the business disciplines of organisational behaviour, strategic management, and leadership/management.

Urquhart and Fernandez (2013, p. 345) discuss the usefulness of grounded theory in the information systems discipline. Mansourian (2006) and Selden (2005) cite many grounded theory studies that exist in the LIS discipline. Recent constructivist grounded theory studies in LIS include Zhu (2016), Davis (2015) , Harlan (2012), and Lloyd-Zandiotis (2005).

Locke (2003, p. 95) emphasises its usefulness in studying management processes such as decision making and change management, as well as the complexities of the actions of key players. Fendt and Sachs (2008, p. 448) value the technique for its ability to engage with the lived experience of the manager. Locke

(2003) quotes a large number of management studies that use grounded theory, proving that it is a well-established research method in this field. As an example, Cao and Dupuis (2009) use grounded theory to identify how core competences are used by international retailers in China.

Therefore, grounded theory suits the objectives of this research: the development of a theory that explains how the University Librarian can ensure the relevance of the academic library to its stakeholders in the face of competition from open access information sources.

Grounded Theory Method or Delphi Study?

This research could be seen to imitate a Delphi study because it seeks a consensus of expert opinion for the purpose of generating theory (Day & Bobeva, 2005, p. 103; Pickard, 2013, p. 149). A second way in which this study imitates a Delphi study is that the first round of questioning can begin with an exploratory open-ended approach, followed by further rounds of refined structured questioning (Day & Bobeva, 2005, p. 106). However, a Delphi study differs from a constructivist grounded theory study because it has a post-positivist epistemology that strives to achieve generalizability (Day & Bobeva, 2005, p. 105). Moreover, according to Day and Bobeva (2005, p. 108) a Delphi study is not suited to the study of individual human experience in context because it seeks "aggregations of opinion", rather than rich and detailed data. Hsu and Sandford (2007, p. 5) also argue that the Delphi technique does not provide an in-depth study of a topic. Therefore, a grounded theory is more closely aligned to the purposes of this research.

Criticism of Grounded Theory

Grounded theory has elicited some controversy amongst researchers. Cecez-Kecmanovic and Kennan (2013, p. 118) argue that grounded theory can be both a method and a data analysis technique, while Pickard (2013, p. 179) rejects its classification as a research method, in favour of it as an analytical technique. Indeed, Pickard (2013) bases this assertion upon the writings of Strauss (1987, p. 5), one of the founders of the method, who stated that it was not really a specific method or technique, but rather a style of analysis. Nevertheless, it is widely regarded as a method and has grown to become the most popular qualitative research method, according to Higginbottom and Lauridsen (2014, p. 8). Grounded theory is used across a wide range of social science domains including information systems (Bryant

& Charmaz, 2007b, p. 1; Reichertz, 2007, p. 215; Urquhart, 2007, p. 339) and LIS (Mansourian, 2006; Selden, 2005)

3.3.4 Grounded Theory Procedure

Grounded theory methods consist of systematic procedures relating to data collection and analysis, enabling the researcher to construct a theory that is *grounded* in the data (Charmaz, 2014, p. 1). Charmaz (2014) states that, for Glaser and Strauss, the following practices define a grounded theory:

- Simultaneous involvement in data collection and analysis
- Constructing analytic codes and categories from data, not from preconceived logically deduced hypotheses
- Using the constant comparison method, which involves making comparisons during each stage of the analysis
- Advancing theory development during each step of data collection and analysis
- Memo writing to elaborate categories, specify their properties, define relationships between categories, and identify gaps
- Sampling aimed toward theory construction (theoretical sampling), not for population representativeness
- Conducting the literature review after developing an independent analysis (p.7).

The systematic, simultaneous analysis of data through interrelating categories allows the researcher to advance an emerging theory throughout the course of research (Birks & Mills, 2011, p. 10; Charmaz, 2006, p. 5; Creswell, 2013, p. 84). The second practice of using inductive logic means beginning data collection without any preconceived theory or hypothesis in order to avoid "forcing the data" or using data to fit a theory (Charmaz, 2006, p. 5; Glaser, 1978, p. 36; Glaser & Strauss, 1967, pp. 33-34). The constant comparative analysis of data has a pragmatic purpose in helping the researcher to avoid procrastinating (Charmaz, 2006, p. 24).

The next defining component is that the researcher must have the insight and analytical skill to follow an investigative strategy and examine the resulting data and its categories (Glaser & Strauss, 1967). In short, Glaser and Strauss (1967) state "the theorist's task is to make the most of his insights by developing them into systematic theory" (p. 256). The researcher is also required to be "theoretically sensitive", or to

have a level of insight that enables them to understand the concepts that emerge from the research and to be attuned to the complexities in the data (Glaser & Strauss, 1967, p. 46; Mills, Bonner & Francis, 2006b, p. 28).

Another defining practice of writing memos allows the researcher to define categories and relationships in processes, which aids in fleshing out the theory (Birks & Mills, 2011, p. 10; 2015, p. 11; Charmaz, 2006, p. 5; Creswell, 2013, p. 85).

Finally, the literature review is not conducted in-depth until the theory construction stage (Charmaz, 2014, p. 8). Glaser (1978, p. 31) is concerned that literature reading should be paced in order to generate concepts from the data that are not contaminated by preconceived concepts from literature. Glaser (1992, 1998) allows researchers to read in unrelated areas and also in non-professional, popular and ethnographic literature prior to the research. However, Glaser states in *Basics of Grounded Theory Analysis* (1992) that "the dictum in grounded theory research is: There is a need *not* [emphasis added] to review any of the literature in the substantive area under study" (p.31). This dictum is re-emphasised in *Doing Grounded Theory: Issues and Discussions* (1998): "do *not* [emphasis added] do a literature review in the substantive area and related areas where the research is to be done" (p. 67). Glaser (1992, p. 32) argues that this is because grounded theory is about the discovery of concepts and hypotheses, rather than about testing these ideas. Glaser (1992, p. 33; 1998, p. 67) then indicates that the researcher can integrate this literature with the theory at saturation stage.

Some authors argue that the view of the researcher as a blank slate in grounded theory is a misconception (Urquhart & Fernandez, 2013, p. 226). Indeed, Urquhart and Fernandez (2013, p. 226) state that this view is a superficial reading of the literature. Glaser and Strauss (1967) appear to mention literature only once in *Discovery of Grounded Theory*, in stating that the researcher "can (and we believe should) also study an area without any preconceived theory that dictates, prior to the research, 'relevancies' in concepts and hypotheses" (p. 33). Glaser's *Theoretical Sensitivity* (1978) is similarly vague. Glaser (1978) states that "When the theory seems sufficiently grounded and developed, then we review the literature on the field and relate the theory to it through integration of ideas" (p. 31). It could be argued that the scant reference to the role of preconceived knowledge in this early work may

have contributed to the later dispute about the role of the literature review as described in section 3.4.2.

3.3.5 Emerging Strands in Grounded Theory Method

Grounded theory has become a popular method for social science researchers for two reasons. Firstly, it developed at a time when qualitative researchers were seeking to legitimise qualitative research at a time when quantitative methods prevailed in the social sciences (Bryant & Charmaz, 2007a, p. 34; Charmaz, 2006, p. 5; Mills, Bonner, & Francis, 2006a, p. 8; Reichertz, 2007, p. 214). Grounded theory legitimised qualitative research in providing reliability and validity through its emphasis upon data analysis (Bryant & Charmaz, 2007a, p. 33). Secondly, its twenty-first century evolution into a variety of versions means that there may be at least seven versions (positivist, post-positivist, and constructivist, objectivist, postmodern, situational and computer-assisted) that can be adapted to a variety of situations (Denzin, 2007, p. 454; Mills, Bonner, & Francis, 2006a). However, most scholars are agreed upon three main versions of grounded theory: Glaser's school of classic or formal grounded theory, the Strauss and Corbin school (Straussian), and constructivist grounded theory (Bryant & Charmaz, 2007b, p. 10).

3.3.6 Formal/Traditional/Classic Grounded Theory

Barney Glaser and Anselm Strauss' seminal work, *Discovery of Grounded Theory (*1967*)*, rejected the era's positivist social science leanings towards verification of existing theory through deductive logic (Charmaz, 2006, p. 5; 2014, p. 7; Glaser & Strauss, 1967). Glaser and Strauss promoted the creation of new theory through inductive logic (Bryant & Charmaz, 2007a, p. 43). Nevertheless, Jane Mills, Anne Bonner, and Karen Francis (2006a, p. 8) identify the traditional grounded theory as having a post positivist ontology, while Charmaz (2014, p. 235) detects "strong positivist leanings" in the works of Glaser (1978, 1992, 1998, 2001). Indeed, by 2014, Charmaz labels traditional grounded theory as *objectivist grounded theory* (Charmaz, 2014).

Glaser continued to propound formal grounded theory in later works such as *Theoretical Sensitivity* (1978), *Basics of Grounded Theory Analysis* (1992) and through the journal *The Grounded Theory Review*. The basic principles of formal grounded theory have been identified in Section 3.3.4, and the processes are

illustrated in Figure 3.4 below. It is important to note that verification of data is achieved by the researcher's reflexivity in attempting to maintain objectivity towards the data.

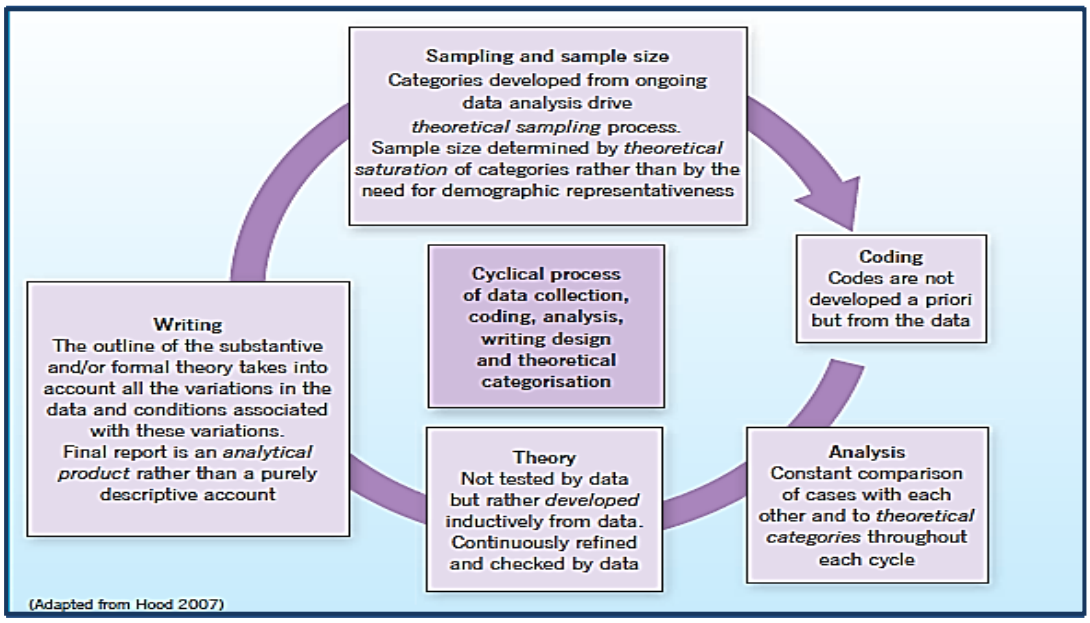

Figure 3.4. Key components of Glaser and Strauss's original model (Higginbottom & Lauridsen, 2014, p.9).

Glaser continued to claim the researcher could remain objective by suspending any preconceptions (Glaser, 2012), using participants own words, being reflexive by constantly monitoring their own biases through memo writing activity, and writing the literature review after the interviews and initial phases of coding are completed (Chiovitti & Piran, 2003). However, according to Bryant and Charmaz (2007a, p. 33) and (Charmaz, 2006, p. 9), the major weakness of this method is in its positivistic assumption that the researcher could remain objective in analysing the data. Indeed, Charmaz (2014, p. 17) rejects the notion of discovering theory as emerging from the data, arguing instead that researchers construct theory through life experiences. Corbin and Strauss (2008, p. 31) also recognise that the objectivist position is viewed by some as unfeasible.

A final objection to formal/traditional/classic grounded theory is that knowledge of theoretical literature, or at least a similar level of professional experience, is advantageous in obtaining and analysing the data, and does not constitute forcing of the data. A number of researchers contest the view that the researcher can remain unaware of theoretical literature (Charmaz, 2014, p. 306;

Henwood & Pidgeon, 2003; Selden, 2005, p. 126). For this researcher, the reflexive methods prescribed by Glaser and Strauss do not provide a sufficiently convincing basis for maintaining the researcher's objectivity. The later disagreement between Glaser and Strauss concerning the forcing of data, suggests there is too much doubt about the objectivity of the researcher and that too much energy is expended upon maintaining a neutral stance towards the data.

3.3.7 Straussian Grounded Theory

While Glaser's original research training had been in quantitative methods (Glaser, 1992, p. 7), Strauss had a background in symbolic interactionism and also interacted with pragmatism and ethnography (Bryant & Charmaz, 2007a, p. 32; Charmaz, 2006, p. 7; 2014, p. 9). These diverging orientations became evident when Strauss and Corbin published *Basics of Qualitative Research* (1990). After its publication, Glaser (1992) protested, in a letter to Strauss, that:

> It leaves out quantitative researchers and will wreck the work of qualitative researchers too, piling up tons of fractured rules instead of cutting directly through to the basic and underlying fundamental relevance (p. 2).

Glaser's main objection was to Strauss' flexible use of prior theoretical knowledge, gleaned primarily from the literature review. Glaser (1992, p. 47) also argues that the use of prior knowledge in the coding paradigm and conditional matrix amounts to forcing the data. This view is supported by Charmaz (2006, p. 115). Glaser (1992, p. 43), Urquhart et al. (2010, p. 362) and Urquhart (2007, p. 343) also complain that Strauss and Corbin were adding unnecessary levels of complexity to the research process. Selden (2005, p. 127) criticises the laborious coding approach of Strauss and Corbin as a threat to creativity. Charmaz (2006, p. 115; 2008, p. 398) appears to agree with this in stating that the flexibility of grounded theory was stamped out in the rigid application of the original guidelines by some researchers. These compelling arguments persuaded this researcher that Straussian grounded theory does not always allow the data to speak for itself. In addition to this, it appears to be overly prescriptive, exhausts energy, and limits the creativity of the researcher.

The 1990 and 1998 editions of *Basics of Qualitative Research* were identified as post-positivist (Charmaz, 2011a, p. 168; 2014, p. 234). However, it is clear that the publication of the third edition (Corbin & Strauss, 2008), represents a clear shift from an objectivist to interpretivist ontology, where the researcher and participant are

influencing each other in the construction of knowledge. Corbin and Strauss (2008) now recognise the interpretivist approach as reality in stating that "researcher and participants co-construct the research (at least data collection) together" (p. 31). They also state that the researcher is present in the analysis stage through interpreting the meanings of the participants (Corbin & Strauss, 2008, p. 49). In the third edition of *Basics of Qualitative Research* (2008, p. 9), Juliet Corbin acknowledges the evolution of grounded theory while expressing admiration for the postmodern and constructionist (constructivist) versions of grounded theory.

3.4 CONSTRUCTIVIST GROUNDED THEORY

Constructivist grounded theory was developed by Kathy Charmaz in the mid-1990s and is intended as a revision of the original formal grounded theory of Glaser and Strauss (Charmaz, 2009, p. 129). However, Mills et al. (2006a, p. 32) trace its relativist ontology to Strauss and Corbin. Constructivist grounded theory falls firmly within the interpretivist paradigm, which is described in detail in Section 3.2.3

This research employs constructivist grounded theory because its purpose is consistent with the research question. Charmaz (2008, p. 398) states that constructivist grounded theory explores action, answering *what* and *how* questions. According to Charmaz (2014, p. 3) researchers construct data and concepts that form the foundation of theory. While it uses the original methods of Glaser and Strauss (1967) in its inductive approach, systematic and comparative data analysis, and open-ended approach to questioning, its interpretivist assumptions mean greater emphasis upon the phenomenon being studied and a radically different interpretive shared experience approach to the way data is analysed and theory is developed (Charmaz, 2005, p. 510; 2009, p. 129; 2014, p. 239; Herring, 2013, p. 206).

3.4.1 The Interpretivist Contribution to Theory Building

Charmaz (2014) acknowledges that "the term 'theory' remains slippery in grounded theory discourse and mirrors ambiguities about what the theory means throughout the social sciences and professions" (p. 228). There is much disagreement in the social sciences about defining "good theory" or the nature of theoretical contribution (Abend, 2008). Indeed, Charmaz (2014) concedes that theory itself contains both positivist and interpretivist elements because it relies on both "empirical observations and depends on the researcher's constructions of them" (p.

231). Therefore, Charmaz (2014) adds to this discourse by offering an interpretive approach to theory that builds upon the elements of theory that are discussed in section 3.3.1. In other words, the basic elements of a theory (*who*, *when*, *where*, *what*, *how* and *why*) (Whetten, 1989) are given extra interpretive components.

According to (Charmaz, 2014) interpretive theory "aims to:

- Conceptualize the studied phenomenon to understand it in abstract terms
- Articulate theoretical claims pertaining to scope, depth, power, and relevance of a given analysis
- Acknowledge subjectivity in theorizing and hence recognize the role of experience, standpoints, and interactions, including one's own
- Offer an imaginative theoretical interpretation that makes sense of the studied phenomenon" (p.231)

The subjectivist /transactional epistemology allows the researcher's voice to be acknowledged, clarified, and heard in the writing of the theory (Mills et al., 2006a, p. 9) (section 3.2.3). Researcher reflexivity is also paramount (Charmaz, 2014, p. 240).

The interpretive relativist ontology recognises that each individual has his or her own reality that has been influenced by life, society or culture (Charmaz, 2008, p. 402; 2011a, p. 168; Mills, Bonner, & Francis, 2006b, p. 26). Charmaz (2014) states that "we construct our grounded theories through our past and present involvements and interactions with people, perspectives and research practices" (p.17). This means that the research is the researcher and participants' mutually constructed interpretation of multiple realities (Charmaz, 2008, p. 402; 2009, p. 138; Higginbottom & Lauridsen, 2014, p. 11). In other words, the researcher is involved in a reciprocal relationship with participants that produces a theory that is grounded in their experiences (Mills et al., 2006a, p. 9).

The axiology (section 3.2.3) recognises that researchers have innate biases and therefore cannot be separate from the data. By investigating the participants' meanings thoroughly, the interviewer is not making assumptions that could misrepresent the data (Charmaz, 2006, p. 35). Charmaz argues that the researcher has an important role in mining tacit meanings as well as the more obvious explicit meanings in the data (Charmaz, 2009, p. 131; Mills et al., 2006b, p. 31). This also

involves the attempt to modify power imbalances that often occur in the researcher-participant relationship (Mills et al., 2006a, p. 9).

Finally, for Charmaz (2014, p. 231) the theory makes sense of the phenomenon in an imaginative way. In this case, the phenomenon is how University Librarians ensure the relevance of their libraries to their stakeholders.

3.4.2 Theoretical Foundations of Constructivist Grounded Theory

Symbolic Interactionism

Charmaz devotes a chapter of *Constructing Grounded Theory* (2014) to symbolic interactionism. The symbolic interactionist approach is defined by Charmaz (2014) as "a theoretical perspective derived from pragmatism which assumes that people construct selves, society, and reality through interaction" (p. 344). She states that its pragmatist philosophy, where reality is "fluid and somewhat indeterminate" (Charmaz, 2014, p. 263) is important to grounded theory because of its emphasis on "process and change" (Charmaz, 2014, p. 265).

Indeed the act of constructing a theory using a research question, where an action has an effect upon another factor reflects the symbolic-interactionist position that "people are unlikely to change either their practices or meanings unless their situations have become problematic and their habitual responses no longer work" (Charmaz, 2014, p. 271). The symbolic interactionist approach to how our interpretations and actions arise from our prior interactions (Charmaz, 2014, p. 265) are explained best by the Johari window (Figure 3.2) as explained in section 3.2.3.

Constructionist or Constructivist Grounded Theory?

Charmaz originally chose the term *constructivist* to differentiate her position from the *social constructionist* approach of the 1980s and 1990s (Charmaz, 2014, p. 14). Charmaz disagreed with the objectivist approach that she perceived in much social constructionist research at the time (Charmaz, 2014, p. 14).

Charmaz (2014, p. 14) acknowledges that her position now aligns well with current *social constructionism*. Current social constructionism cautions against a positivist approach towards truth and understands the relative nature of knowledge because of historical and cultural factors (Burr, 2015). According to Burr (2015), social interaction enables people to construct knowledge, and also to act differently upon that constructed knowledge. Lock and Strong (2010) also state that human

beings have different meanings and understand differently, that these meanings begin with the social action of sharing understandings, and that our meanings and understandings can vary with different contexts.

Charmaz also acknowledges that her constructivism aligns well with the social constructivist learning theory of Lev Vygotsky (Charmaz, 2014, p. 14). Vygotsky (1978) argued that a student will only learn when ready. This stage of readiness is called the *zone of proximal development*, which is:

> the distance between the actual development level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers (Vygotsky, 1978, p. 86).

At the correct developmental level, the student can be assisted by a teacher or a capable peer to attain a higher level of development. This is the idea that underlies the view that knowledge is socially constructed. Therefore, in a research situation, researcher and participant are assisting each other to reach the zone of proximal development in order to understand the processes and actions at work in a phenomenon. The co-construction of data also allows the researcher to open up the participant's areas of the hidden and blind self in the Johari Window (Figure 3.2) and make the data more explicit.

Constructivist grounded theory also differs from its predecessors in its method of verifying the emerging hypothesis. While Charmaz sought to create flexible guidelines, rather than the prescriptive rules of Strauss and Corbin, her approach does create more work for the researcher in checking that meanings are being interpreted accurately. The verification of hypothesis does not occur in the constant comparison of data, as in formal grounded theory, or in the *axial coding* phase of Strauss and Corbin; rather, it occurs between the researcher and participant (Charmaz, 2009, p. 138). The researcher checks the accuracy of description and interpretation with the participant through active listening during the interview, through follow-up interviews, and in checking that the theory is resonating with participants (Charmaz, 2006, p. 183; 2014, p. 338) .

Figure 3.5 below is adapted by Higginbottom and Lauridsen (2014, p. 11) from Charmaz (2006, p. 10). It omits much of the memo writing activity, which is present throughout the research process, but illustrates the high level of interaction between

the researcher and participant. The researcher is constantly returning to the data collection phase for verification of concepts and theory, and for the report writing phase.

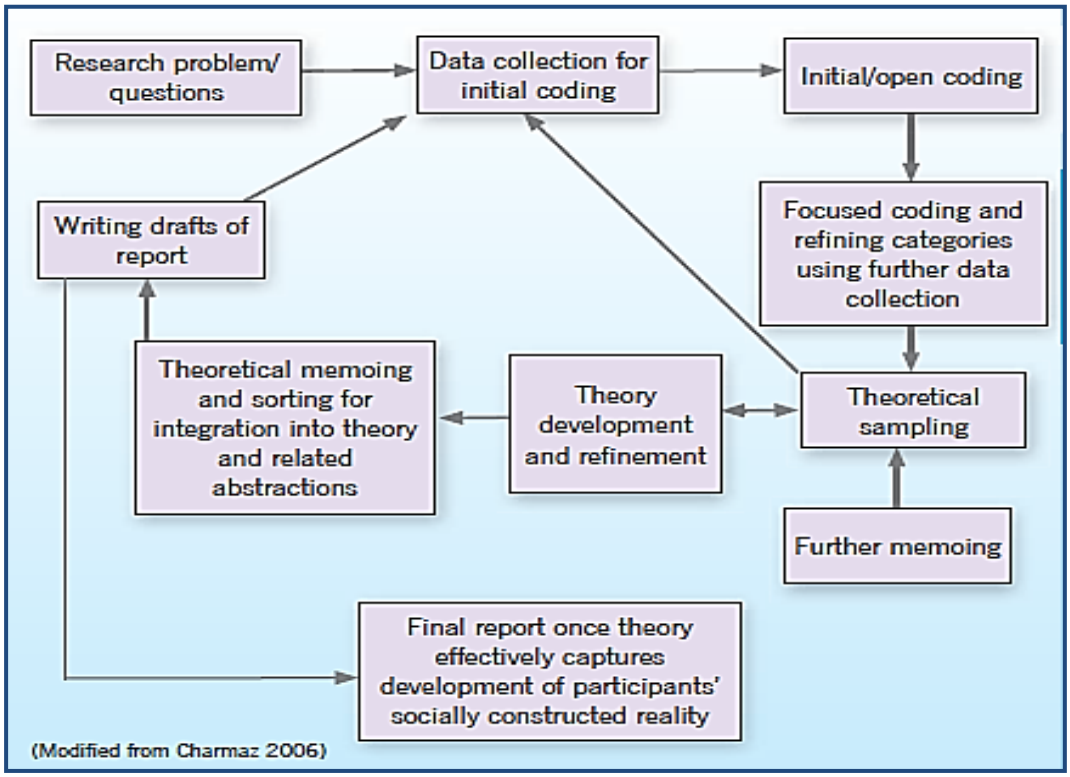

Figure 3.5. Diagrammatic explanation of constructivist grounded theory (Higginbottom & Lauridsen, 2014, p. 11)

3.4.3 Addressing Criticism of Constructivist Grounded Theory

Grounded Theory Cannot Be Constructivist

In spite of Glaser and Strauss' (1967) original wish that researchers would "start developing methods of their own for all of us to use" (p. 12), Glaser (2002) is critical of constructivist grounded theory, arguing that grounded theory cannot be constructivist. His concerns are addressed below.

Constructivist grounded theory avoids reflexive work

Glaser argues that constructivist grounded theory is simply a way of avoiding the reflexive work involved in confronting researcher bias (Glaser, 2002, para.11). However, Charmaz (2006, p. 53) suggests reflexivity from the beginning of the research, rather than only during data analysis. She also proposes to deal with bias by focusing upon creating a more egalitarian approach to construction of data, which

enables greater communication between researcher and participant. By ensuring the voice of the participant is heard correctly, during the interview, and at later times in the research process, bias can be diffused. By encouraging greater communication between researcher and participant, the interviewer is eliciting a correct interpretation of the data and encourages the emergence of valuable data. Moreover, the memo writing process also enables reflexivity throughout the research, coding and theory writing (Charmaz, 2014, p. 165).

This study has ensured reflexivity from the beginning of the research by acknowledging the researcher's background and fears about the interview process. The interviews also involved checking that participants' responses were heard correctly and asking for clarification or further information (see sections 4.3.5 to 4.3.7). The changes in the interview protocol that are described in sections 4.4.1 and 4.4.2 of Chapter Four also demonstrate reflexivity in the researcher's approach to data collection.

Preconceived Interview Questions Force Data

Glaser (2002, para. 10; 2012, para. 15) objects to preconceived interview questions and Charmaz's "forcing" approach to interview guides, arguing for open questions which will lead to greater emergence of data. Glaser (2001) is also critical of the constructivist preconceived framework as producing a "mountain of data" (p.152). Indeed, Glaser (2001, p. 53) warns against generating too much data, stating that it detracts from generating theory. However, Charmaz (2014, p. 31) states that the guiding concepts used in interview questions are merely the beginning "points of departure" for the study, which continues to generate more data from the gathered data itself. Therefore, the study begins with a topic defined by the researcher, but the research explores the topics that participants viewed as important (Charmaz, 2014, p. 32).

Sections 4.4.1 and 4.4.2 of Chapter Four explain the evolution of this research from a forcing interview protocol used in the pilot study to the less structured protocol of the main study. The first interview protocol demonstrates a pre-occupation with collecting data, as Glaser (2001) warns. However, the interview protocol for the main study demonstrates a more relaxed, open-ended approach, which allowed participants to discuss topics that were important for them (Charmaz,

2014, p. 32). The reflexive approach that is required through the entire research process prevented forcing of data.

Active Listening Forces Data

Glaser (2002) acknowledges that, while grounded theory can be done through a co-constructed interview, he argues that much grounded theory interviewing involves "very passive listening and then later during theoretical sampling focused questions to other participants during site spreading" (para. 5). Once again, this is a position that cannot be sustained because of the power asymmetry that automatically occurs in interview situations and is recognised by many authors (Brinkmann & Kvale, 2015, p. 171; Charmaz, 2006, p. 27; 2014, p. 72; Roulston, Baker, & Liljestrom, 2001). A power imbalance in the interview can sometimes lead to situations where participants hide their opinions and feelings, or exaggerate their achievements, leading to bias in the data collection and analysis (Charmaz, 2006, p. 27; 2014, p. 73; Khiat, 2010, p. 1464). Such data collection can lead to the development of a theory that lacks credibility.

Section 4.3.7 of Chapter Four quotes a passage of interview with Participant 8, that the researcher later conceded was forcing the data. This enabled the researcher to determine that this data fragment was not about *leadership*. Once again, researcher reflexivity averted the forcing of data.

Constructivist Grounded Theory is concerned with "Worrisome Accuracy"

Glaser's (2002) criticism of constructivist grounded theory constantly refers to its concerns with "worrisome accuracy" (para. 8). Glaser (2002, para. 8) argues that the main concern should be the emergence of the abstract theory, rather than concerns that the interpretation of the participant's meaning is correct. Glaser (2002, para. 9) asserts that Charmaz is concerned with "descriptive capture", missing the importance of theoretical abstraction in grounded theory methods. From a practical point of view, concern with accuracy in data collection was absolutely necessary in this research. On one occasion, at least, the buffering during Skype interviews led to some serious misinterpretations of participant meanings. For example, during an interview with Participant 1 (P1), the researcher heard the phrase *shared leadership* as *serve leadership*. Such a misinterpretation could have undermined the credibility of the theory.

Moreover, the second edition of *Constructing Grounded Theory* addresses Glaser's concerns by discussing "developing theoretical sensitivity through theorizing" (Charmaz, 2014, p. 244). Section 6.2 of Chapter Six abstracts the theory from the descriptive substantive theory to a higher level of abstract theory.

Table 3.2 opposite illustrates the ways in which Charmaz compares the positivist assumptions of objectivist grounded theory with the interpretivist assumptions of constructivist grounded theory. This table omits Straussian grounded theory, which falls between the two theories presented here. However, it demonstrates the vast differences between the two types of grounded theory method in terms of their foundational assumptions, objectives, and implications for data analysis.

Table 3.2.

Objectivist and Constructivist Grounded Theory: Comparisons and Contrasts (Charmaz, 2014, p.236)

Comparisons and Contrasts

Objectivist Grounded Theory	Constructivist Grounded Theory
Foundational Assumptions • Assumes an external reality • Assumes discovery of data • Assumes conceptualizations emerge from data analysis • View representation of data as unproblematic • Assumes the neutrality, passivity, and authority of the observer	Foundational Assumptions • Assumes multiple realities • Assumes mutual construction of data through interaction • Assumes researcher constructs categories • Views representation of data as problematic, relativistic, situational, and partial • Assumes the observer's values, priorities, positions, and affections affect views
Objectives • Aims to achieve context-free generalizations • Aims for parsimonious, abstract conceptualizations that transcend historical and situational locations • Aims to create theory that fits, works, has relevance, and is modifiable (Glaser)	Objectives • Views generalizations as partial, conditional and situated in time, space, positions, action, and interactions • Aims for interpretive understanding of historically situated data • Specifies range of variation • Aims to create theory that has credibility, originality, resonance and usefulness
Implications for Data Analysis • Views data analysis as an objective process • Sees emergent categories as forming the analysis • Sees reflexivity as one possible data source • Gives priority to researcher's analytic categories and voice	Implications for Data Analysis • Acknowledges subjectivities throughout data analysis • Views co-constructed data as beginning the analytic direction • Engages in reflexivity throughout the research process • Seeks and (re) presents participants' views and voices as integral to the analysis

Constructivist grounded theory method is the best means of addressing the research question for several reasons. Firstly, the organisational contexts of academic libraries belong to a range of university types with varying challenges (see section 5.1.3). Table 3.2 shows that constructivist grounded theory enables the co-constructed theory to specify "a range of variation" (Charmaz, 2014, p. 236).

Secondly, because constructivist grounded theory "aims for interpretive understanding of historically situated data" (Table 3.2) (Charmaz, 2014, p. 236), it

acknowledges that the theory encompasses the particular time of open access information.

Thirdly, because the research question explores the experience of University Librarians, constructivist grounded theory is chosen because it "seeks and (re) presents participants' views and voices as integral to the analysis" (Table 3.2) (Charmaz, 2014, p. 236). Finally, constructivist grounded theory method recognises the "problematic, relativistic, and partial" nature of data (Table 3.2) (Charmaz, 2014, p. 236), and therefore allows the collective experience of the University Librarians to provide understanding of how they ensure the library's relevance.

3.5 CONCLUSION

Chapter Three has presented an overall methodology that assumes an interpretive philosophical world view that requires a qualitative approach. This chapter has argued that a grounded theory research method is necessary to produce a new theory about a substantive field for which no theory exists. The chapter detailed the interpretivist worldview, comparing it with positivist and post-positivist paradigms, and provided background to grounded theory method, noting the differences between the three main types of grounded theory: formal/classic grounded theory, Straussian grounded theory, and constructivist grounded theory. Chapter Three has also provided a rationale for constructivist grounded theory as the research method used to develop a new theory. This chapter has provided background for Chapter Four, which details the research design of this project. The next chapter explains the researcher's background and how the research problem was identified. The next chapter also explains the steps taken to collect, analyse, and ensure saturation of the data in order to generate a grounded theory about how the University Librarian ensures the relevance of the academic library to its stakeholders in the face of competition from open access information sources.

Chapter 4: Research Design

This chapter details the methods and procedures that produced the substantive grounded theory that is described in Chapter Five. In general, grounded theory method, which is explained in Chapter Three, entails the collection of data, constant comparison of data, coding and analysis of the data, and then making decisions about where to collect the next data (Glaser & Strauss, 1967, p. 45).

This chapter is organised in the following way:

- The position of the researcher (4.1)
- Identifying the research problem (4.2)
- Research procedures (4.3 to 4.6)
- Conclusion (4.7)

This chapter begins in a constructivist grounded theory fashion by revealing the researcher's background and stating how bias can be reduced in the research project (section 4.1). It then explains how the research question was devised (section 4.2). The chapter then describes the processes of the initial data collection, initial coding, focused coding, determining saturation, and memo writing (sections 4.3 to 4.5). Following on from this, the chapter describes the processes of theoretical sampling, theoretical coding, sorting memos, integrating the memos, and writing the first draft (section 4.6).

4.1 POSITION OF THE RESEARCHER

Constructivist grounded theory recognises the role of the researcher in the construction of theory. As identified in Chapter Three, Charmaz (2006, 2014) acknowledges that the researcher and participant are co-constructors in the research. Constructivist grounded theory's subjectivist epistemology accepts that few researchers can be a blank slate due to professional experience and prior research (Birks & Mills, 2011, p. 22; Charmaz, 2011a, p. 166)). Charmaz (2006, 2014) states that the researcher's professional, academic and research background can either impede or encourage the emergence of data, or slant the theory according to the researcher's bias. Indeed, Lempert (2007, p. 261) stresses that no researcher of

human subjects can remain neutral, but must acknowledge their own ideological biases. In order to account for the researcher's natural bias, Charmaz urges the incorporation of reflexivity into the research design (Birks & Mills, 2011, p. 53). This requires a significant level of self-insight in order to critically examine thought processes and to ensure the researcher is not forcing prior research or professional experience onto the theory.

Therefore, it is appropriate to expand upon this researcher's background. After some twenty-two years' experience as a librarian, primarily in academic libraries, the idea for this research emerged after the completion of a single case study which investigated a small higher education college as a learning organisation. This research led to interest into how learning organisation concepts apply to the academic library context. In addition to this, an interest in the role of the CEO or director of the library guided the research focus to the importance of the University Librarian in developing strategy.

In spite of this prior professional and research experience, this research commenced with an attitude of "theoretical agnosticism" where the researcher maintains a critical stance towards prior knowledge (Charmaz, 2014, p. 201; Henwood & Pidgeon, 2003, p. 138). The researcher is confident that this stance was maintained for two reasons. Firstly, while this research began with prior knowledge of *sensitizing concepts* (Charmaz, 2014), or the data elements that are relevant to the emerging theory, these concepts were only used as a tentative tool for the development of interview questions and at later stages of analysis (Charmaz, 2014, p. 31). These concepts were changed when they were not reflected in the empirical data (Charmaz, 2006, p. 17).

Secondly, and more importantly, the literature review unveiled a research gap in the application of two theories to how university libraries ensure their relevance: learning organisation theory; and dynamic capabilities theory (see Chapter Two). Because this grounded theory study proposed to generate new theory about how the University Librarian can ensure the relevance of the library to its stakeholders, it was expected that University Librarians may be applying many more strategies than those already explored.

Indeed, the application of a second literature review after the completion of the grounded theory revealed two more theories that related to the co-constructed

substantive theory: stakeholder relationship management theory (Bourne, 2009) and evidence-based library practice (Connor, 2007; Eldredge, 2006; Hernon et al., 2014) (see section 6.4.6). Therefore, it was important that the substantive grounded theory was allowed to emerge from the research data.

4.2 IDENTIFYING THE RESEARCH PROBLEM

Because of the inductive nature of the early stages of grounded theory, Glaser argues that the researcher begins research with an interest in an area, but without a clear research question (Cutcliffe, 2003, p. 423; Glaser, 1992, p. 22; 1998, p. 118). The researcher begins with:

> An abstract wonderment of what is going on that is an issue and how it is handled. Or what is the core process that continually resolves the main concern of the subjects. (Glaser, 1992, p. 22)

Charmaz (2014, p. 31) advises that grounded theorists' background assumptions may provide sensitising concepts that help to shape research topics at the beginning of the study. A return to the literature review during "saturating, densifying and sorting" (Glaser, 1992, p. 33), or during "sorting and writing up" (Glaser, 1998, p. 67), allows the researcher to discover the substantive field in which the emerging theory lies (Glaser, 1992, p. 32). The theoretical sampling stage also allows the researcher to reject or modify concepts (Reichertz, 2007, p. 225). Therefore, the theoretical concepts of learning organisation theory and dynamic capabilities theory that were discussed in the literature review (Chapter Two) would be further examined in the discussion chapter (Chapter Six), and they would be discarded if they weren't reflected in the interview data.

Therefore, the main research question is an *abstract wonderment* (Glaser, 1992, p. 22) , stripped of any theoretical concepts. It is restated here:

> How can the University Librarian ensure the relevance of the university library to its stakeholders in the face of competition from open access information sources?

4.3 INITIAL DATA COLLECTION

4.3.1 Initial Sampling

Grounded theory sampling does not follow a prescribed routine, but rather requires flexibility in the research design. Unlike statistical sampling which uses a random and representative sample, a grounded theory sample is purposive, where the sample is chosen according to specific criteria (O'Reilly, 2009, p. 197). The process of sampling in grounded theory is unique because a sample size is not accurately defined at the outset, and the researcher does not know when or where the data will be collected (Birks & Mills, 2011, p. 69). Grounded theory sampling is a procedure of following clues that are gleaned during the interview, or are based upon the recommendations of participants (Birks & Mills, 2011, p. 69). The purposive sample should provide data that is relevant to the purpose of the research (Glaser, 1978, p. 48; Glaser & Strauss, 1967, p. 36). Therefore, the sample should produce the richest data through participants' expertise or experience in the phenomenon (Glaser & Strauss, 1967, p. 63; Morse, 2007, p. 231).

The researcher determined that the richest data would emerge from the CEO of the library, known by the title of University Librarian. The University Librarian is the executive leader of the University Library and leaders are responsible for creating and embedding organisational culture through their values, beliefs and actions (Schein, 2010). The main criterion for inclusion of participants was that they had experience in the role of University Librarian for at least five years (Charmaz, 2014, p. 197). While seven of the participants had the required level of experience as University Librarian, the other five had less than three years' experience at this level. For the purposes of the interviews, this was not a problem due to their experience as Associate University Librarian or department head prior to their appointment as University Librarian. Indeed, as some had been incumbent in the role of University Librarian for a relatively short time, their foci at the time of interview had allowed them to talk at length about the current strategies they were employing.

Due to employment changes in the sector it was difficult to engage a second regional university librarian who met the sampling criteria. Participant 10 (P10) was originally interviewed as a regional university participant. The engagement of Participant 12 (P12) during theoretical sampling fulfilled the requirement for a second RUN participant. P10's university was identified later as more closely

aligned with the Innovative Research Universities (IRU) sector (see section 5.1 of Chapter Five).

4.3.2 Sample Range and Size

Sample Range

The initial sampling phase included interviews with 10 University Librarians from a range of publicly funded university libraries. University Librarians were recruited from the United States and from a range of university contexts in Australia because this provided an opportunity for comparison between the university contexts, providing nuance and better quality to the theory (Charmaz, 2014, p. 33). It was also important to ensure sufficient range of contexts to ensure the credibility of the theory (Charmaz, 2014, p. 337). The justification for the inclusion of these participants is provided in section 5.1 of Chapter Five.

Table 4.1 below shows the range of university libraries in the initial sample. The Australian universities are grouped according to their membership of formal university groupings that partner and collaborate to influence public policy, to enhance research opportunities and to market themselves (Australian Technology Network of Universities, n.d.). For the purposes of this research, the universities are identified and labelled from the following formal university networks

- *Group of Eight Universities (Go8)*: A group of eight Australian elite status research intensive universities (Group of Eight Australia, n.d.)
- *Australian Technology Network (ATN)*: Australian universities of technology with teaching and research strengths in vocational and technological areas (Marginson & Considine, 2000, p. 189; Williams, 2010, p. 34).
- *Innovative Research Universities (IRU)*: Australian universities that conduct research. Generally located in outer metropolitan and regional areas (Bastian, 2014, p. 15; Innovative Research Universities, 2015).
- *Regional University Network (RUN):* Regional Australian universities servicing non-metropolitan populations (Marginson & Considine, 2000, p. 208)

The American universities are not formally grouped, but are funded by their respective states and in this research they are called *United States state system universities (USSU).* Sections 5.1.4 to 5.1.8 of Chapter Five provide more detail about each of these university groupings. For each university group, two participants were interviewed to gain multiple views of their experiences and actions (Charmaz, 2014, p. 33).

Table 4.1.

Range and Number of University Libraries for Initial Sampling

Group of Eight Universities (Go8)	Australian Technology Network (ATN)	Innovative Research Universities (IRU)	Regional University Network (RUN)	United States State System Universities
Go8-1	ATN-1	IRU-1	RU-1	USSU-1
Go8-2	ATN-2	IRU-2	RU-2	USSU-2

Sample Size

It is important to note that the sample size is determined by the depth of saturation, or the adequacy of the data to justify the theory (Bowen, 2008, p. 140). In other words, the emphasis is upon achieving quality in the data rather than obtaining quantity (Bowen, 2008, p. 142). Because the purpose of this research was to generate a theory, the analysis focuses upon making sense of the data rather than noting the frequencies of codes (Mason, 2010, para. 1).

However, there is an uneasy tension in designing a study that is efficient in its application, yet produces sufficient depth and range of data to produce a credible theory. Indeed, the researcher was aware that this research may have required an increased number of participants to obtain professional credibility (Charmaz, 2014, p. 108). Mason (2010, para. 50) argues that a skilled interviewer who can obtain high quality data may achieve saturation after 10 interviews, while a novice interviewer may require more interviews. This view is confirmed in a study by Guest, Bunce, and Johnson (2006). Their analysis of the coding of 66 interviews demonstrated that much data saturation had occurred within the first 12 interviews, rendering the data gathered in the remaining interviews as extraneous. Guest et al. (2006, p. 77) argue that saturation relies upon researcher qualities and experience in producing high quality data.

Therefore, as illustrated in Table 4.1, above, 10 participants were interviewed as an initial sample, with the expectation that further participants would be required during the later theoretical sampling stage.

4.3.3 Ethical Clearance

In November 2014, prior to conducting interviews, full ethical clearance was obtained from the QUT Ethics Committee for the conduct of this research (QUT Ethics Approval Number 1400000814). The Participant Information Form (Appendix B) and the Participant Consent Form (Appendix C) outline the procedures taken to ensure participants' anonymity and confidentiality.

4.3.4 Recruitment of Participants

This research involved the recruitment of participants (University Librarians) who were perceived by the researcher as *elites*, or "persons who are leaders or experts in a community, usually in powerful positions" (Brinkmann & Kvale, 2015, p. 171). The researcher anticipated problems such as difficult access because of busy schedules and the necessity of contact through gatekeepers such as personal assistants (Odendahl & Shaw, 2001, p. 299; Williams, 2012, p. 125). Therefore, participants were recruited directly through an initial email, which included a recruitment letter (Appendix A), the Participant Information Form (Appendix B) and the Participant Consent Form (Appendix C). These items mentioned the names of supervisors in order to assert the professional credibility of the project (Odendahl & Shaw, 2001, p. 308; Williams, 2012, p. 125). They also explained the nature of the research, the ethical protocols, and included an assurance of confidentiality (Williams, 2012, p. 124).

4.3.5 Interviews

During the initial sampling phase, 10 participants took part in 11 interviews. Participant One (P1) was interviewed using the Pilot Study Interview Protocol (Appendix E), and was later re-interviewed with the Main Study Interview Protocol (Appendix D) during the main study. P1 was re-interviewed because much of the data from the pilot interview had been excised from analysis. As detailed in section 4.4.2, the researcher considered the Pilot Study Interview Protocol to counteract the open-ended interviewing approach of constructivist grounded theory by including too many questions and inappropriately forcing data (Charmaz, 2014, p. 12).

Charmaz (2014) does not forbid re-interviewing participants from pilot studies. Rather, the constructivist grounded theory process encourages the development of a relationship with key participants. The co-construction of data can be facilitated by the participant's familiarity with the researcher and the research process (Charmaz, 2014, p. 108). P1 was an experienced University Librarian, whose educational background and preparation for the pilot study interview demonstrated that another interview using the Main Study Interview Protocol (Appendix D) would better reflect constructivist grounded theory epistemology and ontology. Indeed, following the second interview, P1 remarked upon the difference between the interviews and how they produced different data.

Table 4.2 (below) provides data about the participants, their university type and location, and interview length. In order to protect the identity of participants, further identifying data has been omitted from the table.

Table 4.2.

Initial Sampling Interviews

Participant code	Date of interview	University type	Interview length (mins)
P1- 1st interview	05-Dec-2014	State system university United States	51:37
P1 – 2nd interview	09- Jul- 2015		23:25
P2	09-Jan-2015	University of Technology Australia	48:20
P3	16-Jan-2015	Innovative Research University Australia	24:49
P4	30-Jan-2015	Regional University Network Australia	51:37
P5	31-Mar-2015	Group of 8 University Australia	41:36
P6	14-Apr-2015	Group of 8 University Australia	18:25
P7	21-Apr-2015	Innovative Research University Australia	41:48
P8	08-May-2015	University of Technology Australia	40:51
P9	28-May-2015	State system university United States	21:23
P10	19-Jun-2015	Innovative Research University (Meets criteria) Australia	35:31

The rationale for using interviews as the primary data collection tool was derived primarily from the research problem (Charmaz, 2006, p. 15), which then

drove the purpose of the research. According to Brinkmann and Kvale (2015, p. 133) interviews can aid in the development of empirically grounded theoretical concepts. The research problem focused upon how the University Librarian ensures the library's relevance to stakeholders in the face of competition from open access information sources. Therefore, it made sense to obtain data from the source with the greatest experience of the phenomena – the University Librarian.

The rationale for conducting interviews also derives from the underlying interpretive assumptions of the research method. Because the relativist ontology of constructivist grounded theory investigates the experience and actions of the participant, intensive interviewing is the best strategy for eliciting data about the participant's experience (Charmaz, 2014, p. 58; Lofland & Lofland, 1995, p.18; Mason, 2002, p. 63).

In addition to this, the political nature of the University Librarian's environment means that participants are concerned about confidentiality and security of data. An interview provides participants with some control over their responses in ways that other data collection techniques cannot. Indeed, this concern about confidentiality was borne out during the sampling process. For example, a participant expressed concern that a discussion was being recorded after the completion of the interview. On another occasion during the process of securing interviews, a participant sought extra assurance about the confidentiality of the data and the way in which it would be de-identified.

Face-to-face intensive interviewing suited the transactional epistemology of constructivist grounded theory research because the interview is the mutual interaction between researcher and participant (Lofland & Lofland, 1995, p. 19; Qu & Dumay, 2011, p. 247) where they jointly construct meaning (Charmaz, 2014, p. 59; Garton & Copland, 2010, p. 533). Another reason for choosing in-depth interviews was that they fulfilled the interpretivist world view which allowed the researcher to explore the details of the participant's context, situation and interactions (Charmaz, 2014, p. 58; Mason, 2002, p. 64).

The final reason for using interviews for data collection is that the interpretivist paradigm is reflected in the interaction between the interviewer and participant (Mason, 2002, p. 65). As Charmaz (2006, p. 179) states, the depth of the interaction between researcher and participant directly affects the richness and quality of the

data. Charmaz (2014, p. 33) encourages the establishment of rapport with participants. Indeed, Charmaz (2014, p. 91) notes the development of social bonds during the interview process. An example of this was the developing relationship with P1, who was interviewed through Skype™ with the Pilot Study Interview Protocol, and then re-interviewed face-to-face six months later with the main question from the Main Study Interview Protocol. The following passage demonstrates a more conversational tone to the second interview, and a stronger rapport. In this second interview, P1 playfully chided the interviewer for suggesting some data may be excluded from the transcript:

> *FH: Thank you very much. As you said that I thought "That doesn't sound very American to me". By the way, those little comments don't go into my thesis.*
> *P1: OK! Your dissertation is a little selective. Australian tea!*
> *FH: That's the solution to everything! OK. Another thing that you did mention …* (P1, interview two)

At a practical level, personal interviews satisfied the time constraints placed upon these busy executives. They also had an assurance that all responses were *on the record*, which, once again, assured them of the security of their data. Personal interviewing was also valuable because it enabled the interviewer to pick up on non-verbal signals that may not have been noticed in the Skype™ interviews (Birks & Mills, 2011, p. 75; Odendahl & Shaw, 2001, p. 309). As the research progressed and the theory began to emerge, the interviews became more focused and shorter in length (Glaser & Strauss, 1967, p. 76).

4.3.6 Strategy for Interviewing Elites

The quality of interplay between researcher and participant can affect the quality of the data (Birks & Mills, 2011, p. 56; Charmaz, 2014, p. 73). Constructivist grounded theory requires reflexivity, and this researcher openly admitted to some trepidation about interviewing University Librarians. This apprehension occurred because, whilst this researcher had extensive experience in academic libraries, and in management of small libraries, there was a perception of a large power imbalance in favour of the participant, which could have affected the quality of the interview data (Birks & Mills, 2011, p. 57). The *halo effect*, where the researcher is over-awed by the reputation of the participant means some information may not have emerged in

the interview (Williams, 2012, p. 109). A reluctance to ask probing questions of participants who are perceived as elites may have unfavourably impacted the credibility of the entire research.

Therefore, impression management of the researcher's status, expertise and institutional affiliation was important in interviewing elite professionals who are accustomed to power (Brinkmann & Kvale, 2015, p. 171; Charmaz, 2014, p. 73; Odendahl & Shaw, 2001, p. 307). Establishing the purpose of the research as formulating theory for best practice complimented the participant and encouraged better participation and interview responses (Odendahl & Shaw, 2001, p. 311). In addition to this, disclosing the researcher's prior experience as a librarian and library manager before the interview established a shared professional culture and a symmetry in the relationship that helped in shaping the joint construction of meaning (Brinkmann & Kvale, 2015, p. 171; Cunningham, 2012, p. 63; Roulston et al., 2001).

4.3.7 Semi-Structured Intensive Interviews

The main reason for the use of semi-structured interviews was that an open (unstructured) interview does not give structure to the data generation process (Mason, 2002, p. 69). Also, semi-structured interviews, according to Qu and Dumay (2011), "help develop understanding of the ways in which managers make sense of, and create meanings about, their jobs and their environment" (p. 247). According to Brinkmann and Kvale (2015):

> A semi structured life world interview attempts to understand themes of the lived everyday world from the subjects' own perspectives. This kind of interview seeks to obtain descriptions of the interviewees' lived world with respect to interpretation of the meaning of the described phenomena. (p. 31)

Indeed, (Williamson, 2013a, p. 361) argues that semi-structured interviews are consistent with an interpretivist approach because they capture the participants' views and perspectives of situations.

The semi-structured interview assumes that the questions must be understood by the participant, while the interviewer responds sensitively to the participants world view (Qu & Dumay, 2011, p. 247). To the participant, the interview feels like "a conversation with a purpose", but the interviewer is thinking quickly about the content and sequence of the interview (Mason, 2002, p. 67). The following excerpt

from the interview with Participant 3 (P3) illustrates how the interviewer is listening for data that requires elaboration:

> *FH: You just mentioned something about media there. Did I hear that correctly, and can you tell me more about that?*
> *P3: Especially through special collections, we use blogs and other types of social media – Facebook, Twitter, and that type of thing, to get our message out. And surprisingly, some of that does get picked up by the media, the commercial media, the external media.*

The interviews were face to face or via Skype™ so that subtle cues could not be missed and communication was encouraged through active listening skills (Brinkmann & Kvale, 2015, p. 164; Richmond, McCroskey, & Hickson, 2008, p. 64). Active listening required attentive listening to the participant's answers so that emerging themes could be explored further in order to answer the research question (Brinkmann & Kvale, 2015, p. 165). Active listening also involved the techniques of paraphrasing the speaker's meaning, expressing understanding of the speaker's feelings, expressing empathy, and asking the participant to elaborate on and refine thoughts and feelings (Hoppe, 2006).

Charmaz (2014, p. 82) observes the power of the interview in bringing new insights to the participant's mind. Hiller and DiLuzio (2004, p. 16) call this process *reflexive progression*. The following interview extract with P1 illustrates how the interviewer's paraphrase of the participant's meaning led to the participants' reflexive progression:

> *FH: That's fascinating, what you've just said, because it sounds like you've turned what happens in a lot of libraries on its head. What I mean by that is I've heard other librarians say that they're the ones that get the feedback from the students. They're the ones who are talking to the students. You're like the subjects of the students – you're the research subjects of the students.*
> *P1: Right, right. That's interesting.*
> *FH: That's an observation that I'm making. I'm fascinated that you are doing that. You don't have to say anything to that (Laughs).*
> *P1: But, what comes to mind additionally is that the focus is less on fixing a problem in fact the focus is not on fixing a problem. The focus is on identifying problematical situations and developing the collective capacity to*

consider possibilities so that when something out of the blue develops, we have a nimble and resilient workforce that naturally knows to collaborate. That over time, and with practice, ensures our relevance.

In order to ensure that participants' definitions and meanings were elicited correctly (Charmaz, 2006, p. 33) the researcher used probing questions such as "Can you tell me more about that?", and interpreting questions such as "Do you mean …?" This helped to ensure the researcher was not forcing data by falsely assuming that both interviewer and participant had the same understanding about meanings. An example of an attempt to probe further is given below in an interview with Participant 8 (P8). The probing question may have been an inappropriate attempt to force a particular answer. In this case, the participant acknowledged the researcher's interpretation, but explained the situation as a response to a situation, rather than as an act of leadership:

FH: So, you were taking the lead in that situation?
P8: In a way, yeah, because someone needed to, and we were responding to student frustrations. I was going to meetings, so what I was doing, I was distilling that information and passing it on to my web team to put it up however they saw fit, and students quickly found that and then the word spread around through Facebook and whatever "Keep your eye on the library website because they'll tell you when you can go into certain areas".

This interview excerpt also demonstrates that any concerns about the power imbalance in the interview relationship with elite participants were unfounded because of the secure status of the participants. Moreover, while challenges to statements are a reasonable way of discovering new insights (Brinkmann & Kvale, 2015, p. 172), they were unnecessary because all participants engaged positively with the interviewer.

Charmaz (2014, p. 59) states the importance of research into the participant's situation or organisation. Williams (2012, p. 161) emphasises the importance of researching background information about the participant and their leadership context because elites are irritated when asked for information that can be obtained elsewhere. Therefore, pre-interview preparation included research using library policy documents and web searches into the participants' professional backgrounds.

Dressing in a similar fashion as the participant, as recommended by Odendahl and Shaw (2001, p. 311), was only necessary for face-to-face interviews.

4.4 THE RESEARCH PROCESS

4.4.1 Recording

Two recording tools were used simultaneously. These included a digital recorder and the researcher's mobile phone for face to face interviews. In the case of Skype™ interviews, the interview was recorded using Skype Recorder™ and the researcher's mobile phone. This was necessary, because on two occasions one of the devices failed to record. This extra care ensured the successful recording and transcription of all interviews.

4.4.1 Interview Protocol

Constructivist grounded theory emphasises diligence in devising open research and interview questions (Charmaz, 2006, p. 18; 2014, p. 63). This meticulous attention to the preparation of research questions ensures the generation of meaningful knowledge and illustrates the researcher's important role in the construction of knowledge (Mason, 2002, p 68). While Charmaz is mindful that Glaser (2002, 2012) has objections about forcing data, she emphasises a careful approach to the interview protocol because data can be forced inadvertently, and wrong questions can fail to elicit relevant data (Charmaz, 2014, p. 63). The interview protocol was formulated using the steps illustrated by Figure 4.1 below.

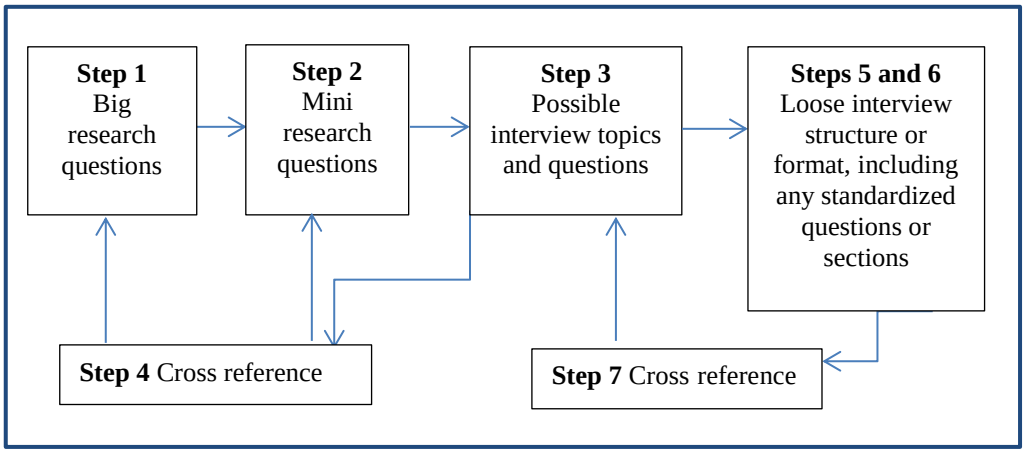

Figure 4.1. Overview of the planning and preparation procedure for qualitative interviews (Mason, 2002, p.72)

1. The formulation of the central research question:

   How can the University Librarian ensure the relevance of the academic library to its stakeholders in the face of competition for open access information sources?

2. The central research question was then divided into subcategories, or mini-research questions (Mason, 2002, p. 69). The mini-research questions were designed to gather data which shows the process in resolving the problem. The mini-research questions are illustrated in Table 4.3 below.

3. Devising interview topics and interview questions which answer the mini-research questions and the main research question (Mason, 2002, p. 70). The second column of Table 4.3 below lists the topics to be explored.

4. Cross-referencing all levels is illustrated in Table 4.3 below, where the rationale behind the interview questions and their relationship to the research questions is explained.

5. Developing a loose structure for the interview questions (Mason, 2002, p. 70).

6. Standardized questions were used in this research because it involved interviewing busy University Librarians. Data collection was aided by a set of questions for prior perusal by the participant (Appendix D). An accompanying participant information form (Appendix B) gave a brief explanation of the purpose of the research, and the participant consent form (Appendix C) provided an assurance of confidentiality of the data (Appendix B) (Mason, 2002, p. 72).

7. Cross-checking that interview questions are answering the research questions. (Mason, 2002, p.72).

The semi-structured intensive interviews included both open-ended and conceptually based questions (Galletta, 2013, p. 45). The interviews followed a general format:

1. The statement of purpose of the research and thanking the participant for their involvement.

2. The opening section, which is designed to provide the richest data through allowing the participant to narrate their experience.
3. The middle section, which explores the topic in depth, referring back to the opening section for significant material and ensuring the meanings are clarified.
4. The final segment, which uses more conceptually based questions, explores any contradictions and asks the participant for any more thoughts. (Galletta, 2013)

4.4.2 The Pilot Study

A number of interviews took place for the purpose of trialling and revising the interview protocol prior to the commencement of the main study. This pilot study also enabled the researcher to develop and improve interview techniques. Each University Librarian approached agreed immediately to participate in the research. All participants were sent a copy of the interview protocol a few days before the interview took place, and all had spent some time preparing for the interview.

The Pilot Study Interview Protocol and Interview 1

The Pilot Study Interview Protocol (Appendix E) was devised using the process described in section 4.4.1. The way in which the Pilot Study Interview Protocol was created is illustrated by Table 4.3 (below). The five related research questions were then sub-divided into research questions and possible prompts (Column two). Column three explains the purpose of each question and the kinds of data they were designed to generate.

Table 4.3.

How the Pilot Study Interview Protocol was Designed. Adapted by the Author from Iselin (2010, p. 58).

Central Research Question	Interview Question	Purpose of Interview Question
How can the University Librarian ensure the university library's relevance to its stakeholders in the face of competition from open access information sources?	How do you maintain and extend the library's relevance to its stakeholders at the present time of open access?	Introductory question setting context and yielding rich description (Brinkmann & Kvale, 2015, p.160)

Related Research Questions	Interview Questions	Purpose of Interview Question
1. What is the University Librarian's perception of the library's role within the university? **Topic: Background question**	**1.** What do you regard as your library's core services?	Introductory question setting context and yielding rich description (Brinkmann & Kvale, 2015, p.160)
	2. Who are the stakeholders in your academic library?	Intended to reveal the political complexity of the library's position. Important for later prompts
2. What is the University Librarian's perception of the challenges facing academic libraries at the present time? **Topic: The current challenges facing academic libraries**	**3.** What do you perceive to be the challenges facing your library at the present time?	Introductory open-ended question designed to elicit rich data.
	4. How did you find out about these challenges? Possible conceptual prompts: From government legislation/ Administration/advances in technology/current trends in academic libraries/students?	Open-ended question designed to elicit operational data about the librarian's scanning techniques. Specifying question (Brinkmann & Kvale, 2015, p.161)
3. How does the University Librarian deal with the challenges presently faced by academic libraries? **Topic: The strategies for dealing with these challenges.**	**5.** What strategies do you use to deal with these challenges?	Structuring question designed to deal with strategies and processes (Brinkmann & Kvale, 2015, p.162). This question is expected to elicit rich data, but omits direct reference to the learning organisation concept so that questions are easily understood.
	6. Have you instigated new products/systems/services?	Alternate direct question (Brinkmann & Kvale, 2015, p.161). Designed to elicit more specific data if librarian cannot answer question 5. Sets up the next question.
	7. How did you learn about this/these products/services/systems?	Specifying question about processes. (Brinkmann & Kvale, 2015, p.161) Designed to elicit rich data.
	8. How are these products/systems or services maintaining the relevance of your library to its stakeholders?	Specifying question (Brinkmann & Kvale, 2015, p.161). Designed to elicit rich data.

Related Research Questions	Interview Questions	Purpose of Interview Question
4. How does the University Librarian learn about the changing external environment which affects the library? **Topic: Learning about the changing external environment that affects the library**	**9.** How do you know whether you and your staff are learning through these changes and environmental scanning Possible prompt: How do you measure your own learning and that of your staff?	Conceptual question: ascertains whether librarian is reflecting upon own learning and the learning of staff. Collecting data about measurement processes and tools. A specifying question (Brinkmann & Kvale, 2015, p.161)
5. How does the University Librarian perceive the contribution of individual library staff members and teams in achieving the library's relevance to its stakeholders? **Topic: The contribution of individual library staff members and teams.**	**10**. How do individual staff members contribute to making the library's services relevant to its stakeholders	Structuring question (Brinkmann & Kvale, 2015, p.162). Examines learning organisation process and action. Once again omits conceptual terminology.
	11. How do you know whether individual staff members are contributing to making the library's services relevant to its stakeholders? Possible prompt: How do you measure the contribution of individual staff members to making the library's services relevant?	Measurement question. Examines process and action. Specifying question (Brinkmann & Kvale, 2015, p.161)
	12. How do teams or departments contribute to making the library's services relevant to its stakeholders?	Structuring question (Brinkmann & Kvale, 2015, p.162). To find out about team processes and librarian's role in this process.
	13. How do you know whether teams or departments are contributing to making the library's services relevant to its stakeholders? Possible prompt: How do you measure the contribution of teams or departments to making the library's services relevant?	Measurement question. Collecting data about measurement tools. Specifying question (Brinkmann & Kvale, 2015, p.161).
	15. Can you think of anything else that helps the library to achieve relevance to its stakeholders?	Final question may generate original new data which contributes to theory development and may require further research in the literature review.

The first interview took place in December 2014. Participant 1 (P1) fulfilled the criteria for the study, and was the director of a state university library (USSU-1) in the United States of America (US). The interview took place via Skype™. There were some problems with the buffering effect of Skype™. However, member checking a few days after the interview allowed the participant to correct the misheard words on the transcript. This interview used the Pilot Study Interview Protocol (Appendix E).

Reflections on the Pilot Study Interview Protocol

While much valuable data was elicited from the Pilot Study Interview Protocol, the researcher decided to make significant adjustments. There were several reasons for this. Firstly, the Pilot Study Interview Protocol was guided by *Constructing Grounded Theory* (Charmaz, 2006), which gave relatively little guidance on the construction of the interview protocol (10 pages). The second edition of *Constructing Grounded Theory* (Charmaz, 2014) devoted two chapters to this subject. Secondly, the interview protocol was guided by works that were not grounded theory studies. In particular, the Pilot Study Interview Protocol was guided by an interview guide used in a case study (Iselin, 2010). While this literature was useful in guiding the researcher to break the central research question into definable areas for research, the questions were based upon case study interviewing, rather than grounded theory interview techniques. Thirdly, supervisors of the project advised that there may be too many questions, and also, that they may not satisfy grounded theory guidelines.

The final and most important reason is that Charmaz (2014) suggests reflection upon the interview guide using a number of questions including:

> 1. To what extent does the interview guide elicit the research participant's views, concerns, and accounts of experience?
> 2. To what extent does the interview guide reflect my views and interests instead of the participant's experience? (p.64)

These questions compelled the researcher to admit that some of the questions were irrelevant, and some questions constituted forcing of the data according to the researcher's preconceived knowledge, thereby undermining the grounded theory study (Charmaz, 2014, p. 63). Therefore, the areas of the Pilot Study Interview Protocol under question are illustrated in Table 4.4 (below):

Table 4.4.

Reflections on the Pilot Study Interview Protocol after Interview 1

Central Research Question	Interview Question	Reflection
How can the University Librarian ensure the relevance of the university library to its stakeholders in the face of competition from open access information sources	How do you maintain the relevance of your library to its stakeholders at the present time of open access?	The question is satisfactory for obtaining rich data. No changes.
Research Questions	**Interview Questions**	**Reflection**
1. What is the University Librarian's perception of the library's role within the university? **Topic: Background question**	**1.** What do you regard as your library's core services? **2.** Who are the stakeholders in your academic library?	These may have been unnecessary, producing some extraneous data which may prove to be irrelevant to the research question. The first question was irrelevant, but the second question was important.
2. What is the University Librarian's perception of the challenges facing academic libraries at the present time? **Topic: The current challenges facing academic libraries**	**3.** What do you perceive to be the challenges facing your library at the present time? **4.** How did you find out about these challenges? Possible conceptual prompts: From government legislation? From the university administration? From advances in technology? Current trends in academic libraries? From student expectations?	Prompts are unnecessary and constitute forcing of data.
3. How does the University Librarian deal with the challenges presently faced by academic libraries? **Topic: The strategies for dealing with these challenges.**	**5.** What strategies do you use to deal with these challenges? **6.** Have you instigated new products/systems/services? **7.** How did you learn about this/these products, systems & services? **8.** How are these products/systems or services maintaining the relevance of your library to its stakeholders?	Too many questions

Research Questions	Interview Questions	Reflection
4. How does the University Librarian learn about the changing external environment which affects the library? **Topic: Learning about the changing external environment which affects the library.**	**9.** How do you learn about changes in the environment which affect your library? Possible prompts: From government legislation/ Administration/advances in technology/current trends in academic libraries/student expectations?	Learning about the changing external environment affecting the library. There is possible forcing here. This elicited good data, but the prompting questions were not open-ended. Changes are required to prompting questions such as "Tell me more about that?" Forcing is occurring in question 10, and therefore this question will be changed to omit the forcing elements. Forcing: used the learning organisation concepts of Pearn et al.(1995) about environmental scanning and learning.
	10. How do you know whether you and your staff are learning through these changes and environmental scanning? Possible prompt: How do you measure your own learning and that of your staff?	
5. How does the University Librarian perceive the contribution of individual library staff members and teams in achieving the library's relevance to its stakeholders? **Topic: The contribution of individual library staff members and teams.**	**11.** How do individual staff members contribute to making the library's services relevant to its stakeholders?	The contribution of individual library staff members and teams. As the interview progressed, the researcher realized that the data elicited here was a repetition of data gathered in section 4 in the interview protocol. Once again this was wasting the time of researcher and participant and the entire section is deleted.
	12. How do you know whether individual staff members are contributing to making the library's services relevant to its stakeholders? Possible prompt: How do you measure the contribution of individual staff members to making the library's services relevant?	
	13. How do teams or departments contribute to the making the library's services relevant to its stakeholders?	
	14. How do you know whether teams or departments are contributing to making the library's services relevant to its stakeholders? Possible prompt: How do you measure the contribution of teams or departments to making the library's services relevant?	
6. Are there any other considerations that help the library to achieve relevance to its stakeholders?	**15.** Can you think of anything else which helps the library to achieve relevance to its stakeholders?	

The Main Study Interview Protocol

As a result of these reflections, the Main Study Interview Protocol (Appendix D) was devised. Table 4.5 (below) illustrates how the research and interview questions were updated. The interview questions were open-ended, which harmonises with the philosophy of grounded theory, where the researcher commences without an agenda, and has an open mind to emerging data (Charmaz, 2006, p. 26; Corbin & Strauss, 2008, p. 27). In addition, the open-ended style of questioning appeared to suit the University Librarians because they are accustomed to having their opinions sought. Therefore, the questions directly asked "What do *you* [emphasis added] perceive…?" or "How do *you* [emphasis added] discover …?" (Brinkmann & Kvale, 2015, p. 171; Odendahl & Shaw, 2001, p. 313).

Charmaz (2014, p. 65) suggests as few open-ended questions as possible and there are convincing reasons for this. Firstly, Charmaz (2014) cites a number of criticisms of interviews as inauthentic: "What people say may not be what they do, have done, and would do in the future" (p.78). Therefore, fewer formal questions allowed the interviewer to use active listening techniques to detect and explore possible new areas for investigation.

Table 4.5 below illustrates how the research questions guided the interview questions. The central research question was posed as an interview question. If this question was not answered fully in the course of the interview, the related interview questions were asked. The related interview questions focused upon the detail of the experienced phenomenon (Charmaz, 2006, p. 26).

Table 4.5

Main Study Interview Protocol

Central Research Question	**Central Interview Question**
How can the University Librarian ensure the relevance of the university library to its stakeholders and extended community in the face of competition from open access information sources?	1. How do you maintain the relevance of your library to your stakeholders and extended community in the current time of open access
Related Research Questions	**Related Interview Questions**
Who does the university librarian perceive are the library's stakeholders and extended community?	2. Who are the stakeholders in your library at the present time?
What is the university librarian's perception of the challenges facing academic libraries at the present time?	3. What do you perceive to be the challenges facing your library at the present time?

Related Research Questions	Related Interview Questions
How does the university librarian discover the changing environment affecting the library?	4. How do you discover the challenges that affect your library?
How does the university librarian deal with the current challenges?	5. How do you deal with these challenges? 6. How do you know that you and your staff are dealing with these challenges adequately?
Other considerations	7. Can you think of anything else which helps the library to achieve relevance to its stakeholders?

Main Study Interview Protocol and Interview 2

The second interview took place on 7th January 2015. This interview used the Main Study Interview Protocol (Appendix D). The participant (P2) was the University Librarian of a university in the Australian Technology Network (ATN-1). P2 had come prepared and spoke for twenty minutes without interruption to the first question. As so many questions were answered through the first question, only two extra questions were asked – questions 2 and 3. This interview conformed to the more conversational style expected from a grounded theory semi-structured interview.

Main Study Interview Protocol and Interview 3

The third interview took place on 16th January 2015 with the University Librarian (P3) of a university within the Innovative Research Universities network (IRU-1). The same Main Study Interview Protocol (Appendix D) was used and was deemed successful in eliciting valuable data for the study.

Initial Findings

In order to determine that the data collection technique was achieving results, an initial analysis was performed using Leximancer™ software. The sample size included the three pilot study interviews. A drawback of Leximancer™ is that it cannot interpret context in language (Angus, 2014). Instead, context is interpreted by the researcher, and therefore terms such as *things*, *probably*, *terms* and *year* could not be used as sensitising concepts. Another problem with this initial analysis was that the data from the first pilot study interview required some remapping into the main study. This was because some questions from the Pilot Study Interview Protocol (Appendix D) were deemed unnecessary and repetitive. Therefore, close analysis of the fragmented data shows that the concept *services* is probably irrelevant

here because the term was used most in the now disused first question from the Pilot Study Interview Protocol.

The concept map generated by Leximancer™ (Figure 4.2) below, illustrates the frequency of text fragments or concepts in the interview data and the connection and proximity of the concepts to each other.

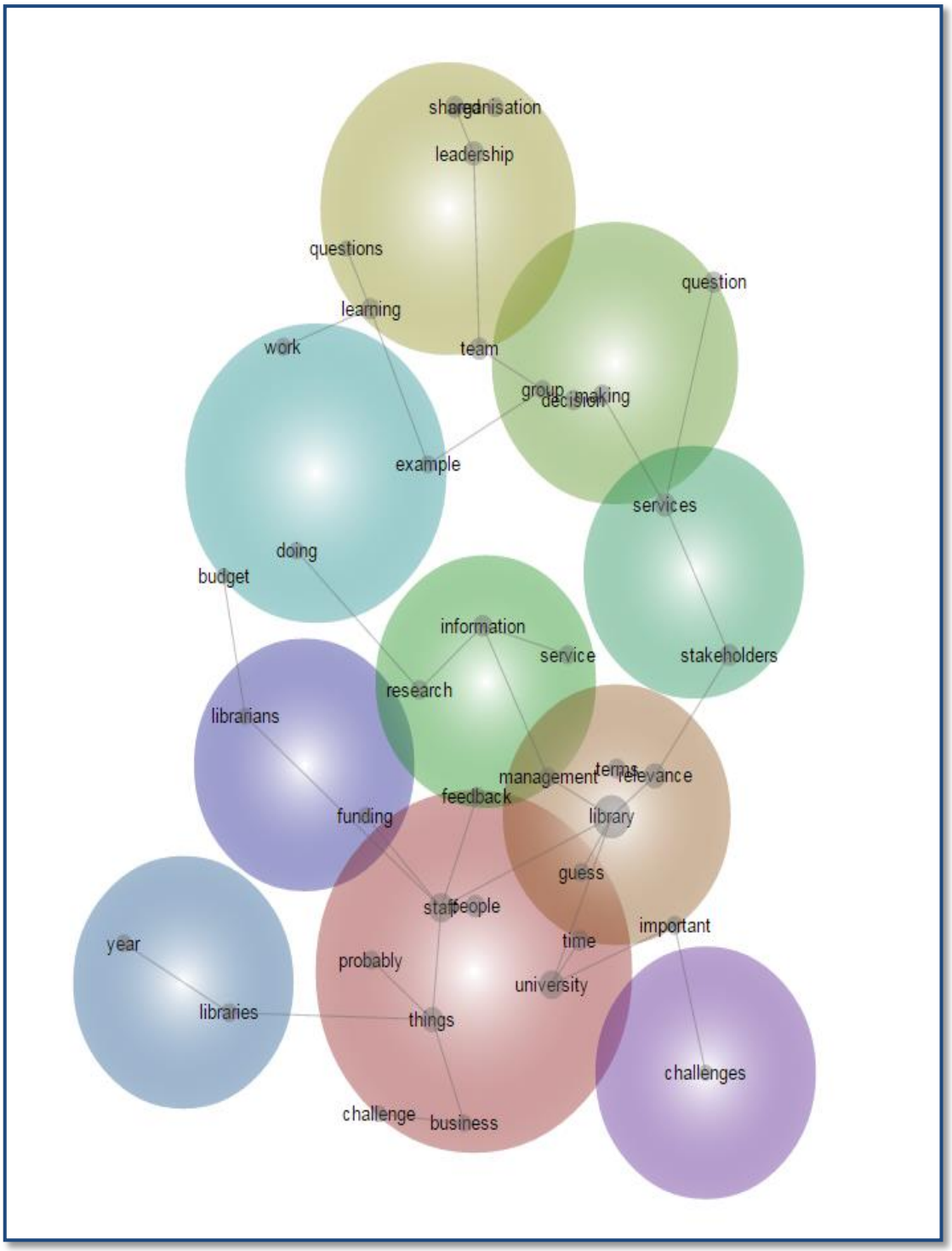

*Figure 4.2.*Concept map of initial concepts and themes using Leximancer™

The larger circles in Figure 4.2 (opposite) represent the most frequent clusters of related concepts. For example, the concept that appears most frequently in the data is *library* (largest grey dot), and this occurs most frequently in connection with terms such as *relevance* and *management.* Another example is that *shared, leadership,* and *team* ocurred in close proximity to text fragments that included *group, decision,* and *making,* suggesting that the concept of *leadership* is related to the concept of *decision making*.

The biggest cluster of word fragments (the largest sphere), at the bottom of the figure, shows the importance of the relationship between the academic library and the university and its academic and professional staff, and the academic library and its own staff. Therefore, the academic library is identified as an intensely people focused organisation. The cluster of overlapping themes at the bottom of Figure 4.2 also show the close relationship between the library, its information and research services, its librarians, and the university in general. These tentative initial findings suggest the importance of a customer service focus.

Table 4.6 below demonstrates the major themes and concepts to emerge from the data, as analysed by Leximancer™. The themes are presented in bold type and include *leadership*, *decision*, *relevance*, *challenges*, *services*, *staff*, *information*, *libraries*, *librarians*, and *work*. The concepts relevant to each of these themes are displayed below each theme heading.

Table 4.6

Themes and Concepts from the Pilot Study

Leadership Team, Learning, Shared, Questions Organisation	**Decision** Group, Decision making	**Relevance** Library, Management	**Challenges**	**Services** Stakeholders
Staff People, Business, University Feedback	**Information** Research, Service, Feedback Management	**Libraries** (Other) libraries	**Librarians** Funding	**Work** Doing

The emergence of themes in the Leximancer™ pilot study analysis showed that the data gathering techniques and the Main Study Interview Protocol (Appendix D) were successful in collecting data that would produce categories suitable for a grounded theory.

4.4.3 The Main Study

The main study included all the data gained from Participants 2 and 3 during the pilot study. As explained in section 4.3.5, relevant data from the pilot study interview with P1 was used, but the data from questions that were deemed repetitive, irrelevant or forced were not used. Therefore the main study excluded large tracts of data gained from the following Pilot Study Interview Protocol (Appendix E) questions:

1(1). What do you regard as your library's core services?

3(2). Have you instigated new products/systems /services?

3(3). How did you learn about these products/systems/services?

3(4). How are these products/systems or services maintaining the relevance of your library to its stakeholders?

4(1). How do you learn about changes in the environment which affect your library?

Data gained from questions 5(1) to 5(4) were also eliminated from the study.

P1 was re-interviewed seven months later using only the main question from the Main Study Interview Protocol (Appendix D). This interview differed from the more structured approach of the pilot study interview by allowing P1 to speak more freely, thus allowing P1 to participate in the construction of the data.

Each interview participant was sent a copy of the Main Study Interview Protocol (Appendix D) two days prior to the interview. The protocol instructed participants that they were free to respond to the questions as they wished, and that they were free not to answer any questions (Hiller & DiLuzio, 2004, p. 10). As a consequence, there were many variations of the interview. Participants chose which questions to answer and the depth of those answers (Hiller & DiLuzio, 2004). Participant 7 (P7) answered the central interview question in-depth, requiring no further questioning from the interview protocol:

> *FH: You've covered just about everything. I'm very pleased that you came to my number six. That was the question - How do you know your staff are dealing with the challenges adequately? That is basically a measurement*

question, and you've answered that in a big picture sort of way. Is there any other way that you are measuring the value of your library?

In contrast, Participant 6 (P6) chose only to answer the related interview questions:

P6: Ok. What I might do actually, is, I suppose it's hard to answer that question without kind of breaking it down into those related questions because it depends really what you mean by relevance and by stakeholders in terms of how I answer the question. So I might just go to the related questions if that's alright.

However, the strategy of sending a copy of the interview protocol was successful in eliciting well-prepared responses from all participants, with many referring to written notes during the interview.

4.4.4 Transcription

The interviews were fully transcribed by the researcher directly after the interview took place. This allowed the researcher to gain thorough knowledge of the data, facilitating recoding earlier transcripts while simultaneously coding later transcripts. It also provided multiple opportunities for analysis through memo writing during the coding process (Charmaz, 2006, p. 68; 2014, p. 92). Transcripts were then sent to each participant for member checking. Any mistakes in transcription were noted by participants and returned to the researcher.

4.4.5 Software for Coding and Analysis

Upon completion of each interview, the transcript was imported into NVivo™ software. This software enabled interview data, coding, memos, and data visualisations to be stored within one project (Richards, 2009, p. 27). These transcripts were then manually coded into nodes created by the researcher for each question. Manual coding into NVivo™ was used in preference to auto coding because some interviews were highly unstructured. For example, as described in 4.4.2, P7 answered the central interview question fully over forty-one minutes. NVivo™ provided coloured codes in the margins of transcripts and its drag and drop feature facilitated the coding process. Memos were linked to nodes as they were written. More importantly, its calculation feature greatly aided the researcher with the quantitative aspect of quickly determining the important codes.

The screenshot below (Figure 4.3) illustrates the initial nodes created in NVivo™. These nodes related to the questions asked in the interview protocol. These nodes included *maintaining relevance* (Q1), *challenges* (Q3), *stakeholders* (Q2) and *discovering challenges* (Q4).

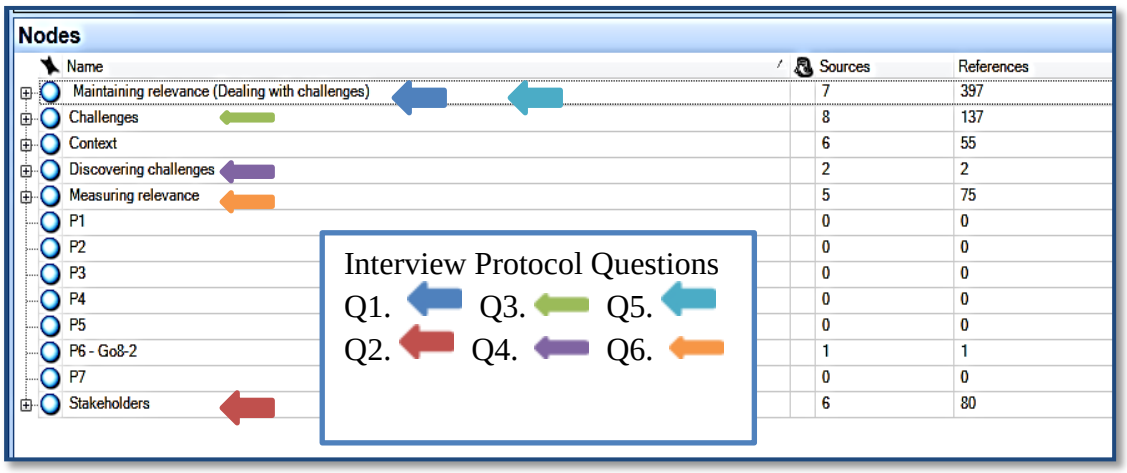

Figure 4.3. Screenshot of NVivo™ coding taken on 30 April 2015 after coding of seven interviews

4.5 DATA ANALYSIS

The data analysis phase involved a cyclical process of turning raw data into the concepts that build abstract theory. The data was continuously and systematically collected, coded and analysed throughout the course of the research (Glaser & Strauss, 1967). There were no distinct phases of data collection, coding and analysis. Rather, the researcher moved between these processes as new thoughts about the data emerged (Glaser & Strauss, 1967, p. 43). However, towards the end of the research, the balance shifted from mostly data collection to analysis (Glaser & Strauss, 1967, p. 72).

Grounded theory employs a high level of analysis in order to create theory (Richards & Morse, 2007, p. 142). Nevertheless, Silverman (2013b) observes that research using interview data "can lead to lazy research in which careful data analysis is simply replaced by reporting back what people have told you" (p. 52). Indeed, Silverman's (2013a) analysis of qualitative research notes the importance of accounting for pauses and stresses in speech, any perceived defensiveness in the participants' speech, and explanations of the textual sequence and context surrounding participants' answers. Constructivist grounded theory addresses this problem by forcing the researcher into an analytical approach through constantly asking questions of the data. In the data analysis phase, the researcher was guided by

work of Charmaz (2006, 2014), Glaser and Strauss (1967), and Glaser (1978, 1992, 1998).

4.5.1 Initial Coding

Initial coding involved fracturing the data, noting categories or themes in margins of transcripts, and comparing them with others in the same and previous interviews (Glaser, 1978, p. 55; Glaser & Strauss, 1967, p. 106; Richards, 2009, p. 141). Saldaña (2013, p. 65) advises, that if the goal of the research is to develop a new theory, that coding methods are the same as those for grounded theory: in vivo, process, initial, focused, axial and theoretical codes. Because of the constructivist approach used here, axial coding was not used.

In vivo codes were used to reflect the language and meanings of participants (Charmaz, 2006, p. 55; 2014, p. 134; Glaser, 1978, p. 70; Saldaña, 2013, p. 4). These codes used the participants' own language. This helped in keeping the researcher from prematurely forcing theory into codes. Examples of in vivo codes used for this research included *Delivery on projects and programs*, *High trust factor with university administration*, and *High commitment to service*. However, in vivo coding can limit the ability to raise codes to theoretical level (Saldaña, 2013, p. 95).

Therefore, this research overwhelmingly used *process* codes, which occurred in tandem with the coding strategies of constructivist grounded theory (Saldaña, 2013, p. 96). These codes suggested action (Charmaz, 2006, p. 49; 2014, p. 121; Saldaña, 2013, p. 96), and consisted of gerunds, or words ending in *ing* (Charmaz, 2014; Saldaña, 2013, p. 96).

Other coding methods were used to delineate different kinds of data, where gerunds were inadequate (Saldaña, 2013, p. 66). Some of these methods included: attribute coding (Saldaña, 2013, p. 70), which provided context for the analysis, e.g. *Regional universities* or *Internal within the university*; or magnitude coding, which added importance to codes or noted dimensions such as intensity, e.g. *Very important* or *Absolutely critical* (Saldaña, 2013, p. 76). This enabled the researcher to delineate and emphasise the codes considered important by participants and facilitated comparisons between the university types.

Figure 4.4 (below) illustrates how initial coding was done in NVivo™. The nodes window (left) illustrates the initial codes, and the way in which tentative

categories and tentative properties developed from analysis, and classification of the codes. Fragments of text were assigned by highlighting the text and then dragging and dropping it into the individual codes. Figure 4.4 also illustrates some of the coding methods used. The red arrow denotes the tentative categories and the rose arrow indicates the tentative properties. The orange arrow denotes the in vivo codes; and the purple arrow denotes the process codes. The green arrow indicates magnitude codes.

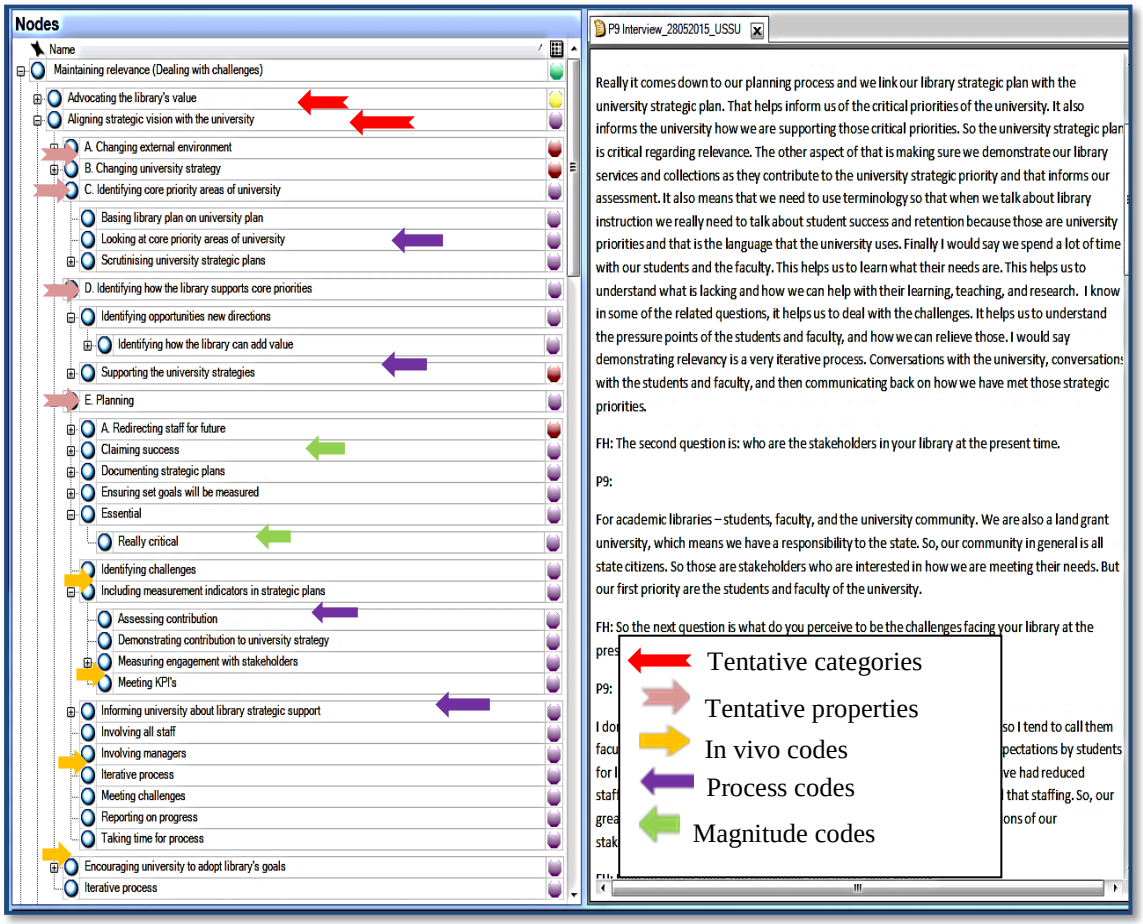

Figure 4.4. Screenshot of NVivo™ coding nodes (left window), P9 interview text (right window), (June 16, 2015)

The number of codes per interview varied according to the thinness or richness of the data (Glaser, 1992, p. 48). However, most of the coding was done line by line (Charmaz, 2006, p. 50; 2014; Glaser, 1978, p. 57)). Line by line coding provided more careful and nuanced study of the data (Saldaña, 2013, p. 23). This was important in order to achieve a theory that was credible. The researcher was able to demonstrate familiarity with the data, and sufficient range, number and depth of observations by interrogating the data line by line (Charmaz, 2014, p. 337).

Each line was assessed to determine a process, how it developed, the thoughts and feelings of the participant, the development of the process and how it determined consequences (Charmaz, 2006, p. 51; 2014, p. 127). This enabled the analysis of tacit assumptions and the identification of gaps for further sampling. Process was easy to ascertain when the words used by participants included *if*, *when*, *because*, *then* and *so* (Saldaña, 2013, p. 98).

As data collection progressed, coding that compared incident to incident helped to identify patterns and to highlight problems for further exploration (Charmaz, 2006, p. 53; 2014, p. 128). These incidents included participants' examples of particular processes or actions they undertook, such as the way P7 overcame the reluctance of academics to use e-books.

The coding process enabled the constant comparison and analysis to take place, where phrases, ideas, or incidents were compared with previous data in the codes (Glaser, 1978, p. 62; Glaser & Strauss, 1967, p. 106). The constant comparative analysis of data entailed comparing data within an interview transcript with that of another transcript, or even the comparison of interviews with the same person (Charmaz, 2006, p. 54; 2014, p. 132). The constant comparison of data helped to ensure that the data accurately reflected the meanings of the constructed codes (Charmaz, 2014, p. 133).

Dey (2007, p. 177) states that in constant comparison of data, the value of categories must be questioned in order to produce valuable theory. If a pattern is identified, Dey (2007), argues, "we need to be more circumspect and ask which patterns are worthy of recognition, or further conceptual analysis, and why"(p. 177). Indeed, Glaser (1992) is wary of coding as merely a method of labelling or description, arguing that the purpose of constant comparison is to generate a theory "that explains how a basic social problem is processed in an action system" (p.43). Initial coding therefore involves asking questions of the data. Glaser suggests the following questions:

- "What is this data a study of?" (Glaser, 1978, p. 57)
- "What category does this incident indicate?" (Glaser, 1978, p. 57)
- "What is actually happening in the data?" (Glaser, 1978, p. 57)

Charmaz adds some extra questions:

- "What does the data suggest?" (Charmaz, 2006, p. 47)
- "Pronounce? Leave unsaid?" (Charmaz, 2014, p. 116)
- "From whose point of view?" (Charmaz, 2006, p. 47; 2014, p. 116)

Figure 4.5 (below) illustrates the coding of a fragment of data from an interview with P6. This fragment of data was coded into as many categories as possible (Glaser & Strauss, 1967, p. 105). The code *Focusing on the digital environment* was coded under the node *Maintaining relevance* because it compared with many other related codes under this node. Most of the codes in Figure 4.5 are descriptive, describing the challenges facing the library. However, the researcher must be analytical, and ask "what is "not obviously stated" (Glaser, 1978, p. 56). Participant P7's unspoken frustration with having to maintain print collections while simultaneously investing in digital collections is revealed, and therefore the code *Drawback of being Go8* is an analytical code, and it was categorised within the node of *Context*. These analytical codes may be constructs that are the researcher's knowledge of the substantive field, but Glaser (1978, p. 71) also warns against creating too many of these codes as the theory may appear too contrived.

Interview with P6	Initial Codes
So the issue for libraries is that the core the notion of what is a library is the printed book. But, you know, much of our print collections in our libraries, certainly at this university certainly haven't been borrowed for a very long time, and we are now much more focused on the digital environment than we've ever been. But, of course, we still have to cater for that print environment and that broad stakeholder group that I've talked about means that what constitutes a library isn't the same for everybody. At same time as we need to be investing in digital services and in digital content, but we are also being expected to maintain and manage print collections. And that's a resource intensive exercise and it's also fraught with a range of issues. That's sort of the first challenge I see and that's the reinvention of the core of what is the library.	*Arguing the library's relevance (Challenges)* *Fighting outdated perceptions about library* *Being expected to maintain print collections* *Focusing on the digital environment (Maintaining relevance)* *Being expected to maintain print collections* *Drawback of being Go8 (Context)* *Diversity of stakeholders* *Different expectations of library* *Drawback of being Go8* *Stretching the budget to maintain print and digital* *Change* *Reinventing the library*

Figure 4.5. Fragment of data from interview with P6 with initial codes

The following excerpt of the interview with P3 provides another example of data that is not emphasised or "not obviously stated" (Glaser, 1978, p. 56). Hidden within the lines of the transcript was a reference to *review*, which was not considered important until the later focused coding stage, and then added to the coding data:

> *The library itself has a really focused annual operating plan with KPI's and we take the acquittal of that quite seriously. So, you know, we're pretty good at benchmarking and* **review** [emphasis added] *and acquittal.*

As coding progressed with each interview, previous codes were refined or re-labelled. Similarly, the constant comparison of data meant that some lines or phrases were un-coded, and prior interviews were re-coded (Saldaña, 2013, p. 11). This activity was constant and simultaneous, and relied heavily upon the researcher's memory of prior interviews. Figure 4.6 below demonstrates how codes emerged from the data and were classified. The left column shows how the data was coded into sub-codes and codes. Some of these classifications were quite complex, with several levels of codes and sub-codes, as illustrated by the sub codes in the middle column.

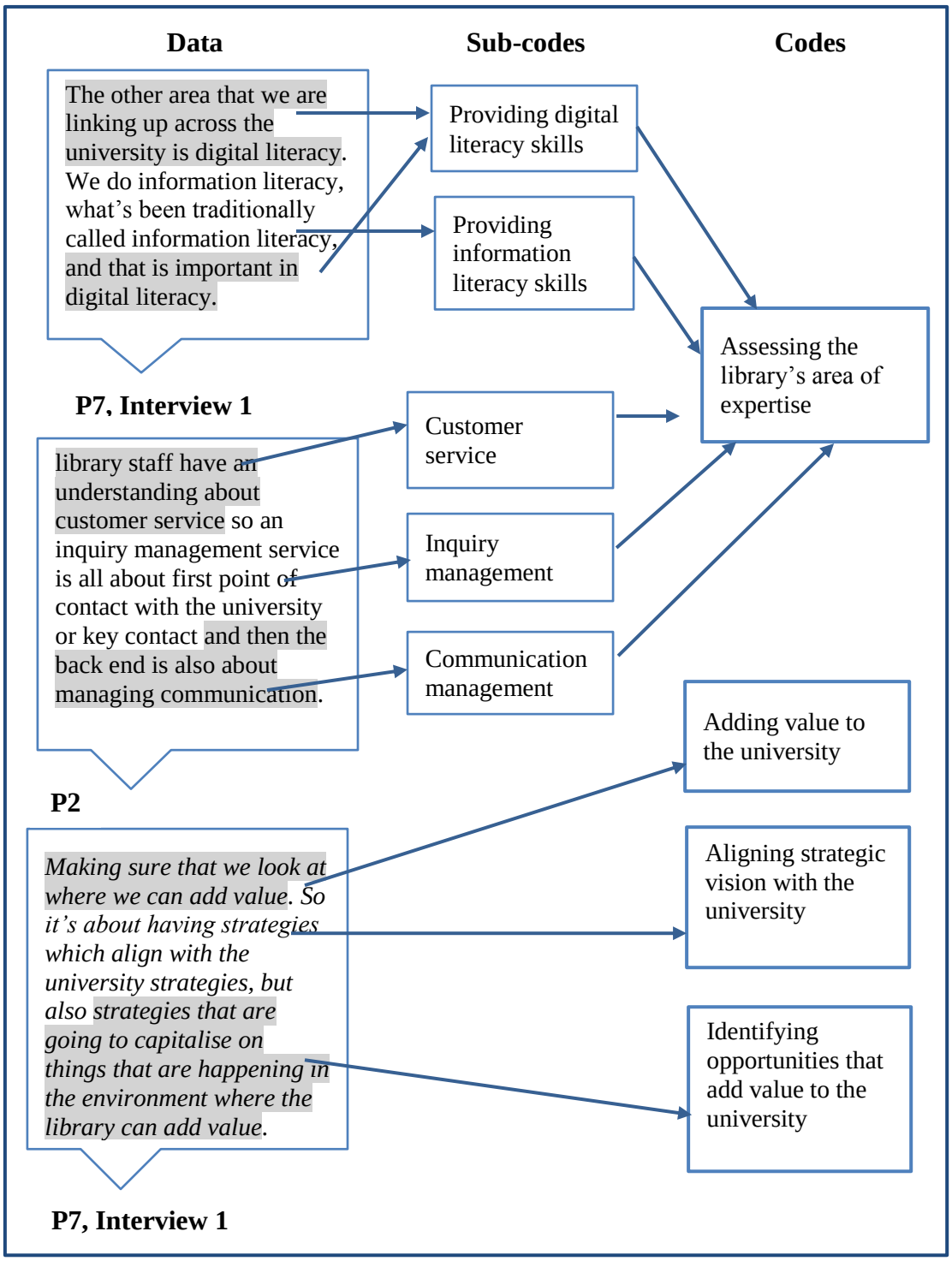

Figure 4.6. Initial coding: from data to codes. Adapted by the author from Saldaña (2013, p. 13)

4.5.2 Focused Coding

Focused coding entailed using the most frequent or significant codes to sift through large amounts of data in order to determine the adequacy of the initial codes and the strength of the emerging concepts (Charmaz, 2014, p. 140). In short, focused coding enables the researcher to isolate the codes with "greater analytic power" (Charmaz, 2014, p. 140). Indeed, as coding progressed to about the seventh interview, the list of coding categories became more select and focused (Glaser & Strauss, 1967, p. 111).

Analysing the codes

Many of the initial categories or nodes (Figure 4.3, above) were gradually replaced by codes derived from the data. It was becoming obvious that the newer codes were more relevant and problematic for the majority of participants. These codes were attracting so many references and sub-categories that they were considered to be potential categories. It became clear that *Engaging stakeholders* was relevant and problematic for almost all participants and this was the first category to clearly emerge. Similarly, often a pattern would emerge in each interview. Participants would end their answers with a general summary. Therefore, the final few lines for each question would often provide a code that summarized the entire passage.

The way in which codes were analysed and categorised is illustrated by Figure 4.7 (below). The memo *Engaging with stakeholders* was a memo about an early code. Similarities were noted between initial codes, such as *Networking within the university* or *Talking with people*. As the number of similar initial codes grew, a tentative category of *Engaging with stakeholders* was created in NVivo™. As the categories became more certain with each interview, the category *Discovering challenges* and its codes were collapsed into the category *Engaging with stakeholders.*

Engaging with Stakeholders

13 April 2015

This is an important code, yet it can be collapsed with several other codes which describe the same process. The question is which code becomes the important code.

Participants 3 and 5 use the term "Engagement". This term is used by these participants because, as Participant 5 states, this is a concept being investigated by CAUL at the moment.

P3 states that engagement is important and that this is reflected in the titles given to staff - Liaison Librarians, and also talks of the Special Collections Librarian as engaging with potential donors, special researchers and other researchers.

This suggests interchangeability with other codes. Therefore, it is appropriate to collapse these codes into one code (Glaser, 1979, p.90).

Maintaining Relevance	Discovering Challenges
Engaging with stakeholders Communicating with stakeholders in their own context Different strategies for different stakeholders	Finding out what stakeholders need
Gaining political support within the university Understanding university governance structure Administration decisions Communicating with university administrators Networking within the university	Looking outward Talking with people

22nd April 2015 Category

After interviewing Participant 7 on 21 April 2015, I decided to elevate the code "Engaging with stakeholders" to a category. This code is sufficiently present in all interviews to date, that I am confident this can be raised as a category. Indeed, Participant 7 stated this as the first factor in maintaining the library's relevance. Further work is required to ensure all codes come within this category and that properties can be defined.

21 May 2015

After coding Participant 7, and beginning the coding in Participant 8 Interview, I have now decided it is time to collapse the codes together: The codes to be collapsed into "Engaging with stakeholders" are from the “Discovering Challenges” node.

Figure 4.7. Initial coding memo “Engaging with stakeholders”, illustrating analytical thought processes

Developing categories

The memo illustrated by Figure 4.7 (opposite) and the nodes shown in Figure 4.8 below show how tentative categories became firm categories as the quantities of data grew. Once the tentative category became a firm category, it was given a category colour. Here *Engaging with stakeholders* (arrowed) became pink. The memo also shows how categories were named and renamed as the quantities of data changed for each tentative category. The code *Being responsive* (arrowed) was originally seen as an attribute for the University Librarian to build into the library. However, as later participants talked about building a culture in the library, this code became part of the tentative category *Developing organisational culture for maintaining relevance* (arrowed). In the final stages of analysis, this tentative category became Category 4: Building an agile and engaged culture.

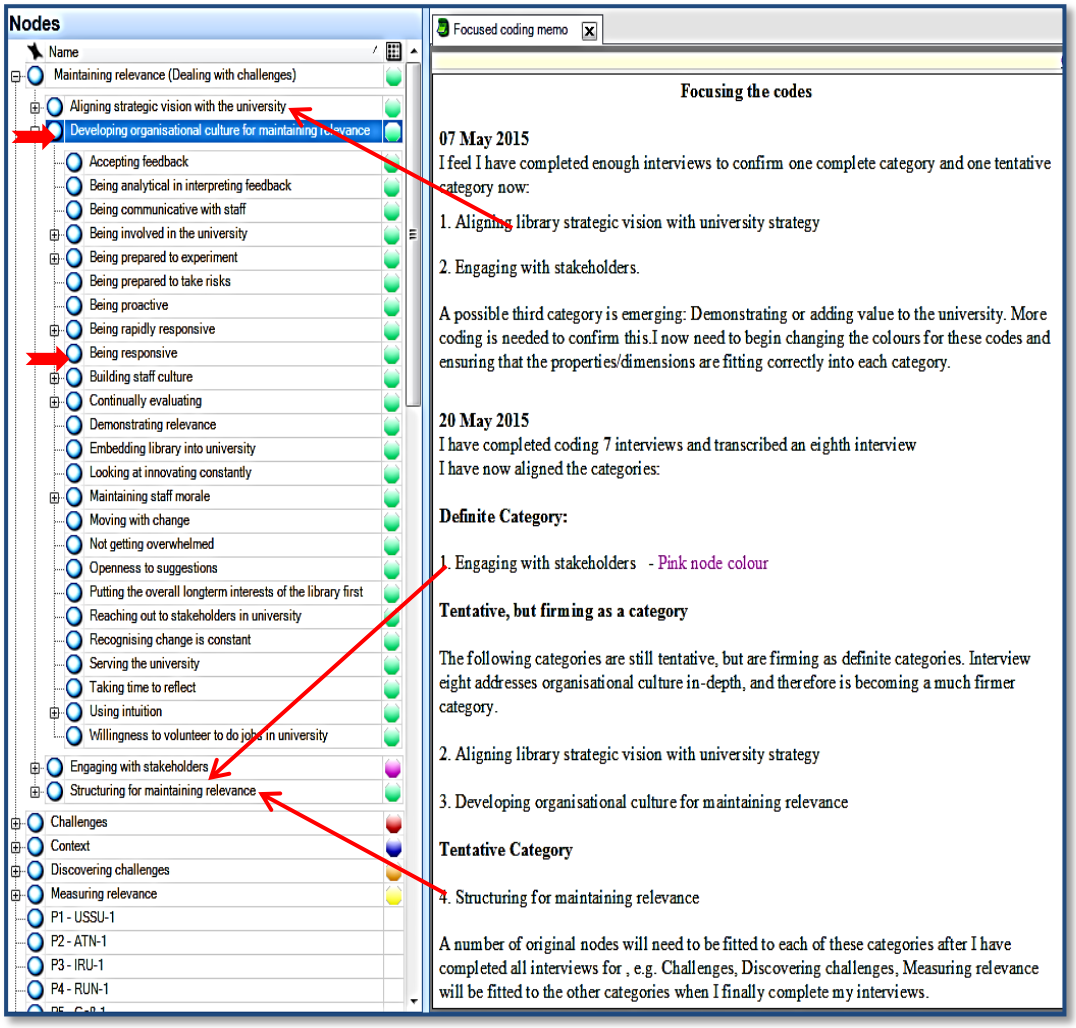

Figure 4.8. Focused coding memo and nodes screenshot after the eighth interview (20 May 2015)

Identifying properties and processes

The purpose of grounded theory, according to Glaser (1978) is to generate a theory that is "relevant and problematic for those involved" (p. 93). Therefore, codes were ordered around the problems or challenges identified by participants. From there, basic social processes were ordered in such a way that it was easy to identify the way in which processes unfolded (Charmaz, 2014, p. 34; Saldaña, 2013, p. 99). Charmaz (2014, p. 34) emphasises that several processes can be identified. The codes were ordered sequentially, focusing firstly upon the problem, then upon the sequences of actions, and finally, if possible, upon the consequences of those actions (Charmaz, 2014, p. 245).

Figure 4.9 (opposite) demonstrates how focused coding occurred. Codes were classified into properties, and then into categories. The arrows show how the processes occur, with, for example, the code of *Identifying opportunities that add value to the university* leading to a cluster of codes under *Adding value.* The codes are then grouped into properties such as *Thinking strategically to enhance the library's profile*. The properties are then ordered into categories such as *Aligning strategic vision with the university*. In short, the detail that is in the interview data becomes focused into categories that become part of the theory.

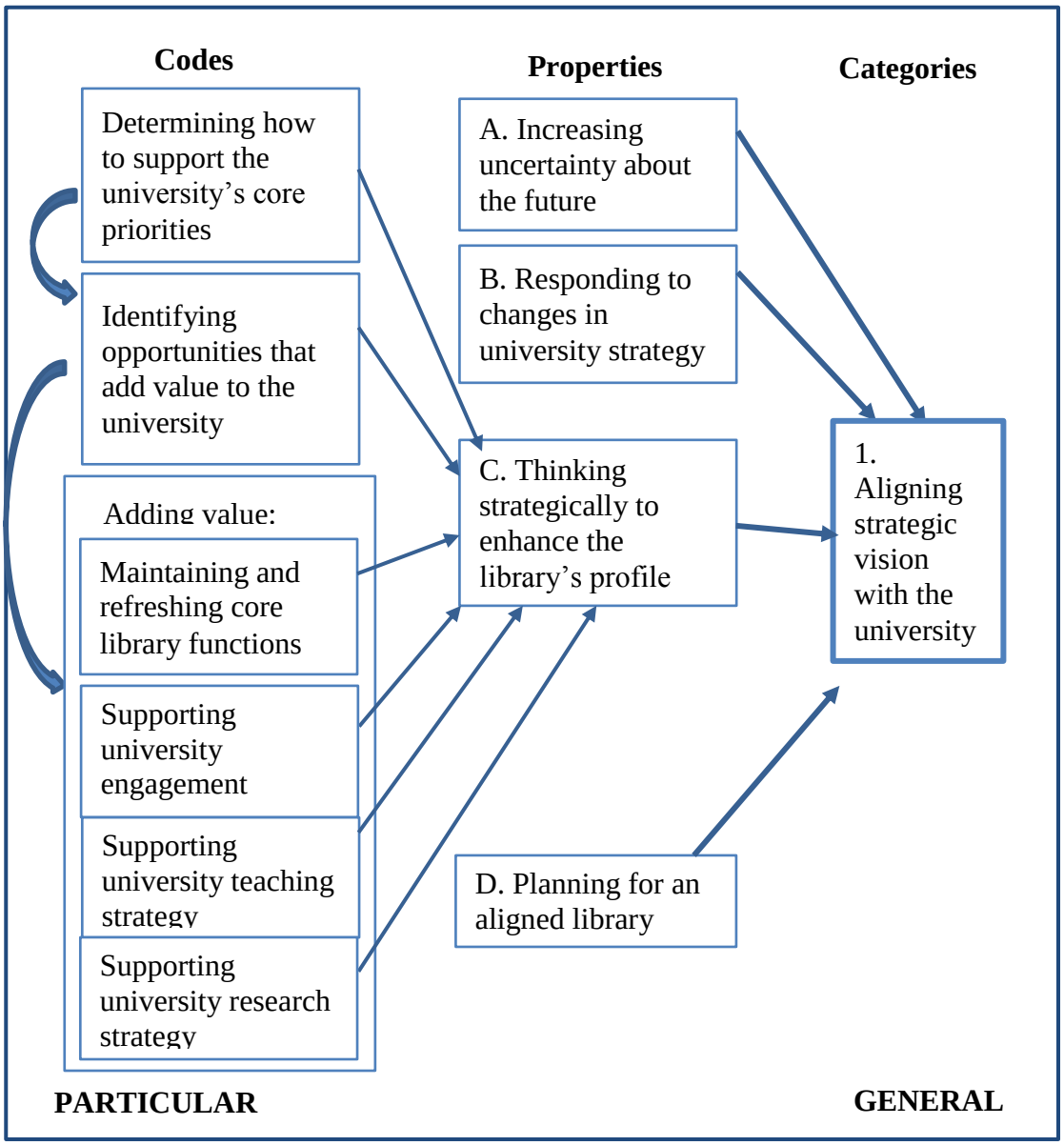

Figure 4.9. Focused coding: from codes to properties to category. Adapted by the author from Saldaña (2013, p. 13)

4.5.3 The Emergent Conceptual Categories

At the conclusion of the focused coding stage, eleven separate interviews with ten participants had produced approximately 1170 codes (Participant 1 was interviewed twice). From these codes, five main conceptual categories emerged, along with the properties that explained the process of these concepts. The five conceptual categories and their properties derived from in vivo codes. In other words, these were concepts that were used by participants frequently enough to be deemed by the researcher to be significant, or they simply phrased the concept accurately. The five conceptual categories were: *Aligning strategic vision with the*

university, *Engaging with stakeholders*, *Reinventing the library*, *Building an agile and engaged culture*, and *Demonstrating value to the university*. Table 4.7 (below) describes in detail the categories and their properties. The properties highlighted in orange are not considered to be saturated. It should be noted that while the categories remained the same from this point onwards, the wording of properties changed as the research continued.

Table 4.7

Conceptual Categories, their Properties and Data Saturation Levels after Focused Coding (September 3, 2015)

CATEGORY	PROPERTY	SATURATION (%)
1. Aligning strategic vision with the university	A. Increasing uncertainty about the future	100%
	B. Responding to changes in university strategy	100%
	C. Determining how to support university strategy	90%
	D. Planning for an aligned library	100%
2. Engaging with stakeholders	A. Knowing the stakeholders	100%
	B. Developing an engagement framework	80%
	C. Engaging internally within the university	100%
	D. Engaging with external stakeholders	90%
3. Reinventing the library	A. Knowing the limits	90%
	B. Transforming systems	100%
	C. Using evidence-based decision making	100%
	D. Making decisions	70%
	E. Transforming the workforce	90%
4. Building an agile and engaged culture	A. Developing culture	80%
	B. Building a customer focus	80%
	C. Building a learning culture	90%
	D. Building team culture	70%
5. Demonstrating value to the university	A. Struggling to demonstrate the library's value	90%
	B. Using evidence-based measurements of value	90%
	C. Demonstrating the library's value	100%
	D. Articulating the library's value	100%
	E. Claiming success	50%

4.5.4 Determining Saturation

At the completion of the focused coding stage, the researcher needed to determine whether *saturation* (filling the categories with data) of the categories and their properties had occurred, or whether further sampling was required. When data saturation of all theoretical categories is at a sufficient depth to generate theory, the sampling and data collection can cease (Glaser & Strauss, 1967, p. 70). This means the researcher can then generate an integrated theory (Birks & Mills, 2011, p. 12). The saturation of coding categories enables the cessation of the sampling activity (Charmaz, 2006, p. 6; Glaser & Strauss, 1967, p. 61).

However, the concept of saturation is somewhat undefined in much of the grounded theory literature. (Charmaz, 2000) states that "in practice, saturation seems elastic" (p. 520). Glaser and Strauss state in *Discovery of Grounded Theory* (1967), that "saturation means that no additional data are being found whereby the sociologist can develop the properties of the category" (p.61).

Dey (1999, p. 116) cautions that saturation does not mean that there is simply sufficient accumulation of data. Rather, determining the saturation of categories is an imprecise science.

Glaser (2001) notes its complexity, stating that saturation is not determined by a superficial recognition of descriptive repetitiveness in the data. Rather, it is:

> The conceptualization [sic] of comparisons of these incidents which yield different properties of the pattern, until no new properties of the pattern emerge. This yields the conceptual density that when integrated into hypotheses make up the body of the generated grounded theory with theoretical completeness. This intense property development of a category is not seen by those researchers who do not do constant comparisons, those who do not do it correctly, that is do it descriptively, or those who cannot stand the tedium (Glaser, 2001, p. 191).

In other words, the researcher should critically determine saturation of categories by scrutinising the data (or properties) within categories, comparing data and categories, and ensuring the relationships between categories and data are sufficiently explained (Charmaz, 2014, p. 214). Charmaz (2014, p. 216) also recommends recoding earlier data if the researcher is unable to saturate categories. Charmaz (2014) suggests asking questions such as:

- Which comparisons do you make between data within and between categories?
- What sense do you make of these comparisons?
- Where do they lead you?
- How do your comparisons illuminate your theoretical categories?
- In what other directions, if any, do they take you?
- What new conceptual relationships, if any, might you see? (p.214)

Bowen (2008, p. 148) determined that a category was saturated if that category was reflected in more than seventy percent of interviews and that the analysis was confirmed by member checking with participants. Bowen's research was not a constructivist grounded theory, but rather used a blend of both classic and Straussian forms of grounded theory, and therefore reflected a more methodical approach to determining saturation (Bowen, 2008, p. 139).

Charmaz (2014, p. 202) does not necessarily agree with statistical measures, which, she argues, are associated with verification methods. Therefore, while this researcher found a statistical approach a useful initial guide for determining saturation of categories and properties, the logic of the theory was also considered as important.

Because of the relatively small size of the initial sample (10 participants) and the need to ensure all university types are represented, the researcher determined that saturation was achieved if more than 80 percent of participants contributed to a category and its properties. If enough data was not represented in properties, further sampling would be required.

This research also considered the above questions about comparisons and conceptual relationships and whether these were adequately explained by the data (Charmaz, 2014, p. 214). Therefore, the frequency of participants' contribution to certain categories was determined manually by noting the number of times participants' data or references were attributed to codes properties, and categories. Once again, this involved a careful manual comparison of data to determine that the context of a phrase was correct. The reason for this decision was that the text query function on NVivo™ proved less efficient or reliable for this kind of data. For example, a text query on the frequency of the following search: (*align, aligning, or alignment*) *AND university AND library*, returned a result of 90 percent of

participants using these words. However, closer scrutiny of the way phrases occurred in the text showed that this was an unreliable way of determining the strength of a property or category. For example, participants had used the word *strategy* frequently, yet it was used in different contexts such as *engagement strategy*.

Another factor in determining saturation of categories and properties was considering if there was enough data to support the theory's claims (Charmaz, 2014, p. 337). Certainly, using a method that quantified the data had shown that three properties had not been sufficiently filled with data. Furthermore, the data gained from the interview with P6 was thin due to a mistake made in failing to ask a particular question. It was determined that the range of data was not sufficient, and therefore it was necessary to gain more data from the Go8 sector of university libraries. Therefore, the next sampling stage of theoretical sampling was required. This is discussed below in section 4.6.1.

Table 4.7 (above) shows that at the end of the focused coding stage, three properties were not sufficiently saturated by the data: *Making decisions (*70%), *Building team culture* (70%), and *Claiming success* (50%). The memo for *Claiming success, Property E - Demonstrating value to the university* (Figure 4.10, below) demonstrates how the properties were analysed in order to assess saturation levels.

Claiming success
Property E – Demonstrating value to the university
Analysis
a) Gaining adequate budget funding (P2, P4)
b) Claiming high regard. (P3, P9, P10)

14 September 2015 - 50% saturation
Only P2 and P4 claim satisfaction with budget funding. Other participants tie the success of the library in maintaining relevance to budget funding, but have experienced significant budget cuts or difficulty in achieving an adequate budget (P3, P5, P6).
14 September 2015. It is clear that further sampling is required in this area

Figure 4.10. Memo for Claiming success, Property E – Demonstrating value to the university.

4.5.5 Memo Writing

The analytical task of asking questions of the data, as mentioned in 4.5.1, is incorporated in the continuous activity of memo-writing. Many authors regard memo

writing as a crucial step in the grounded theory process (Birks, Chapman, & Francis, 2008, p. 69; Charmaz, 2014, p. 162; Glaser, 1978, p. 83). Memos distil data, capture and preserve the coding process, and finally transform the data into theory (Glaser, 1998, p. 180; Holton, 2007, p. 266; Lempert, 2007, p. 245). Moreover, memos capture the reflexive work involved in grounded theory research (Birks et al., 2008, p. 69). In this research, memos acted as an important memory aid. Indeed, both Charmaz (2014, p. 168) and Glaser (1978, p. 83) urge the necessity of stopping activity to write memos whenever ideas arise in the researcher's mind.

Memo writing also aided the emergence of categories. As the researcher wrote about the codes, processes became clearer, enabling the codes to be classified in clusters of concepts, actions and processes, as illustrated by Figure 4.6 (above). Similarly the clusters, visualised in Nvivo™, aided the memo-writing process (Charmaz, 2014, p. 184). The writing process also helped in ensuring the capture of tacit meanings of participants which are often reflected in tone of voice. For example, Participant 5 laughed while talking about a website protest of an academic. It was important to note this in the interview memo, as this meant that P5 did not take this incident seriously.

Memos were organised in Nvivo™ under several categories. Following the example of Birks et al. (2008, p. 72), memos were categorised as *operational memos* and *code memos*. Operational memos included *interview directions*, a *saturation log* and *participant interview memos*. Participant interview memos were written immediately after each interview. These were the researcher's first ideas about the data (Lempert, 2007, p. 251), and they consisted of initial reflections about the interview and possible directions for further interviewing. After coding each interview, an analysis of the interview themes and context was added to the interview memo.

Code memos were written primarily during the focused coding process as soon as categories and their properties began to emerge (Charmaz, 2014, p. 181). The categories represented processes, and the memos provided detailed explanations of their properties, the conditions that created the process, and the consequences (Charmaz, 2006, p. 92; 2014, p. 171).

These memos were important as an aid in analysing and making comparisons between data and codes (Charmaz, 2006, p. 80; 2014, p. 163). The analysis of the

early memos helped to raise codes to a conceptual level at the theoretical coding stage (Charmaz, 2006, p. 81). Lempert (2007, p. 249) cautions against the hasty closure of memo analysis at the theoretical coding stage as this may lead to an inadequate theory. Indeed, analysis of the theory occurred well into the writing up of the theory. At the theoretical coding stage raw data was added to the memos (Charmaz, 2014, p. 182; Lempert, 2007, p. 256). These inclusions brought together the experiences of participants, explained them as part of the theory, and saved time in the eventual write-up (Charmaz, 2006, p. 85; 2014, p. 182).

The task of memo writing proved critical to the next stages of the research process. The written memos enabled the researcher to determine the next research directions, the level of saturation of categories, and finally how the categories interacted with each other, as described in section 4.6.

4.6 THEORETICAL SAMPLING, SATURATION, THEORETICAL CODING AND SORTING MEMOS

4.6.1 Theoretical Sampling

Theoretical sampling occurred at the conclusion of the focused coding of all 10 initial sampling interviews. Charmaz (2000, p. 520) recommends conducting theoretical sampling later in the research in order to allow the data and analytic directions to emerge. This view is supported by Draucker, Martsolf, Ross, and Rusk (2007, p. 1146). The completion of the focused coding stage allowed the researcher to analyse the categories and properties with clarity in order to determine the areas that required refinement (Charmaz, 2000, p. 519).

Theoretical sampling develops properties of categories by deliberately seeking out relevant data until no new properties emerge (Charmaz, 2006, p. 98; 2014, p. 192). This stage also checks for variation and gaps in the emerging theory, which may then lead the researcher to seek new participants or to return to previous contributors (Charmaz, 2006, p. 103).

Many authors regard grounded theory as a method that uses *abductive* logic (Bryant & Charmaz, 2007a, p. 46; Charmaz, 2006, p. 104; 2014, p. 200; Reichertz, 2007, p. 215). Furthermore, Reichertz (2007, p. 225) states that abduction allows the researcher to modify or reject concepts. Charmaz (2006, p. 104) urges great care in deciding whether categories are unsupported by data, or in making decisions about

the relationships between categories (Charmaz, 2006, p. 104). Indeed, Glaser (1998, p. 158) asserts that this stage does not seek negative cases or biases, but searches where there are gaps in the data. Charmaz takes a more nuanced approach to theoretical sampling. She maintains that theoretical sampling helps to account for and to explain certain "surprising findings" or "puzzling findings" (Charmaz, 2014, p. 200).

Filling the Gaps in the Theoretical Puzzle

Following the focused coding stage, it was clear from the memos that the categories were definitive, but that not all properties were complete. The saturation of categories as illustrated by Table 4.7 (above), and sensitivity towards the gaps in some theoretical elements led the researcher to investigate university libraries that had experienced a major restructure. The librarians who had instigated restructuring were most likely to provide the richest data for the remaining puzzling areas of inquiry, and in particular with decision making. It appeared that evidence-based decision making was an important factor for most university librarians, but their decision-making structures and processes were not clear. Many participants had spoken about their decision making in making incremental change, but more data was required about more transformational change. It was also not clear that all University Librarians in the initial sample embraced a team culture. Therefore, theoretical sampling would enable the investigation of the remaining three areas of inquiry: University Librarians' decision-making practices (*Making decisions*); the effects (if any) of the restructure on organisational structure, and in particular upon empowering staff to make decisions (*Building team culture*); and the evidence of success in maintaining relevance (*Claiming success*).

Two extra open-ended interview questions were devised in order to fill the gaps in the theoretical puzzle. These questions are also presented in section three of Appendix D. Table 4.8 (below) shows how the two extra questions were expected to fill the theoretical gaps in the data.

Table 4.8

Theoretical Sampling Questions

Interview Question	Category Gap	Property Gap
How did you make the decisions about your library restructure?	3. Reinventing the library 4. Building an agile and engaged culture	Property D – Making decisions Property D – Building team culture
Are there any factors that might indicate success in maintaining relevance to the university?	5. Demonstrating value	Property E - Claiming success

Snowball Sampling

Approval for a variation to the research questions was gained from the QUT Research Ethics Committee for theoretical sampling on 29th September 2015. Theoretical sampling began using the *snowball sampling* technique to gain the best participants (Patton, 2002). The snowballing technique entailed future participants being chosen from the suggestions of current participants (O'Reilly, 2009, p. 197; Patton, 2002, p. 237). The following excerpt from the interview with Participant 5 (P5) illustrates how the interviews led to recommendations of participants for further interviews:

> *P5: I mean there's quite a lot of benefit - within the Council of Australian University Librarians. Are you talking with [name withheld] at all?*
> *FH: I haven't spoken with her.*
> *P5: She's not on your list?*
> *FH: Well, she could be (laughs) if she becomes significant, yes.*
> *P5: … But, it could be worth your while talking to her, just even particularly about that initiative which she has been masterminding.*

The criterion for participants chosen for theoretical sampling was simply that they should have undertaken a major restructure. The participants included P7, who had mentioned the restructuring of IRU-2 university library. The other participants came from a Go8 university and a RUN university. Participant 11 had completed a restructure recently, while P12 was roughly half way through a restructure. Table 4.9 (below) shows that these interviews were shorter in length because of the narrower scope of the interview.

Table 4.9

Theoretical Sampling Interviews

Participant code	Date of interview	University type	Interview length (mins)
P7	19-Oct-2015	Innovative Research University	20:58
P11	23-Oct-2015	Group of 8 University	23:35
P12	6-Nov-2015	Regional University Network	16:45

4.6.2 Saturation

After each of these interviews, once again the transcripts were sent to the participants for checking. These were then coded, and memos were revised concurrently. By this stage, 1282 codes were categorised into the same categories and properties, thus showing that the research had reached saturation. The theory was further refined to account for any similarities or overlapping of properties. For example, in Category 3 (see Table 4.7), Re-inventing the library, the property *Making decisions* was merged into the property *Using evidence-based decision making.*

4.6.3 Determining the Processes of Each Category

The theory emerged when categories were identified and the properties of each category were defined and ordered. The codes, as displayed in Figure 4.6 (above), were often categorised as a linear process (Glaser, 1978, p. 74; Saldaña, 2013, p. 250). Glaser calls this process *temporal ordering*, where "one thing leads to another" (Glaser, 1978, p. 78). They were also categorised in other ways, such as taxonomies or networks (Saldaña, 2013, p. 251). Glaser labels this sort of categorisation the *dimension family*, where a whole concept is broken down into "pieces of" (Glaser, 1978, p. 75). The categorisation and ordering of properties is shown in Table 4.7 (above). The ordering of categories and properties is explicated and presented in models in Chapter Five.

4.6.4 Theoretical Coding

This sophisticated level of coding occurred after the categories and properties had been defined. This was the theory integration stage and specified the possible relationships between the categories developed in focused coding (Charmaz, 2006, p. 63; 2014, p. 150). According to Glaser (1998) theoretical codes "are emergent and

weave the fractured story turned into concepts back to an organized [sic] whole theory"(p.163).

The researcher analysed categories and properties, noting the logical steps, processes and relationships between them. Charmaz (2014, p. 151) notes a tension between allowing the relationships to emerge and the application of Glaser's coding families (Glaser, 1978, 1998, 2005). The researcher chose to apply Glaser's coding families and in particular, those listed in *Theoretical Sensitivity* (Glaser, 1978). As the researcher noticed relationships emerging between categories and properties, the coding families added precision to the theory (Charmaz, 2014, p. 151). The main coding families used in this research were: *process*, *strategy*, *means-goal*, and *interactive* (Glaser, 1978). The researcher also used other sources to guide the process of theoretical coding. These sources included Saldaña (2013) and the constructivist grounded theory research of Harlan (2012).

Figure 4.11 (below) illustrates how the properties and the categories were coded. The theoretical codes such as *strategy*, *goal* and *culture* explain what is happening with each property or category. Codes such as *interactive* explain how they relate to each other. The themes or concepts such as *strategy* and *culture* are then woven together at a more abstract level in order to provide abstract understanding of the substantive grounded theory (Charmaz, 2014, p. 230) (see section 6.2 of Chapter Six).

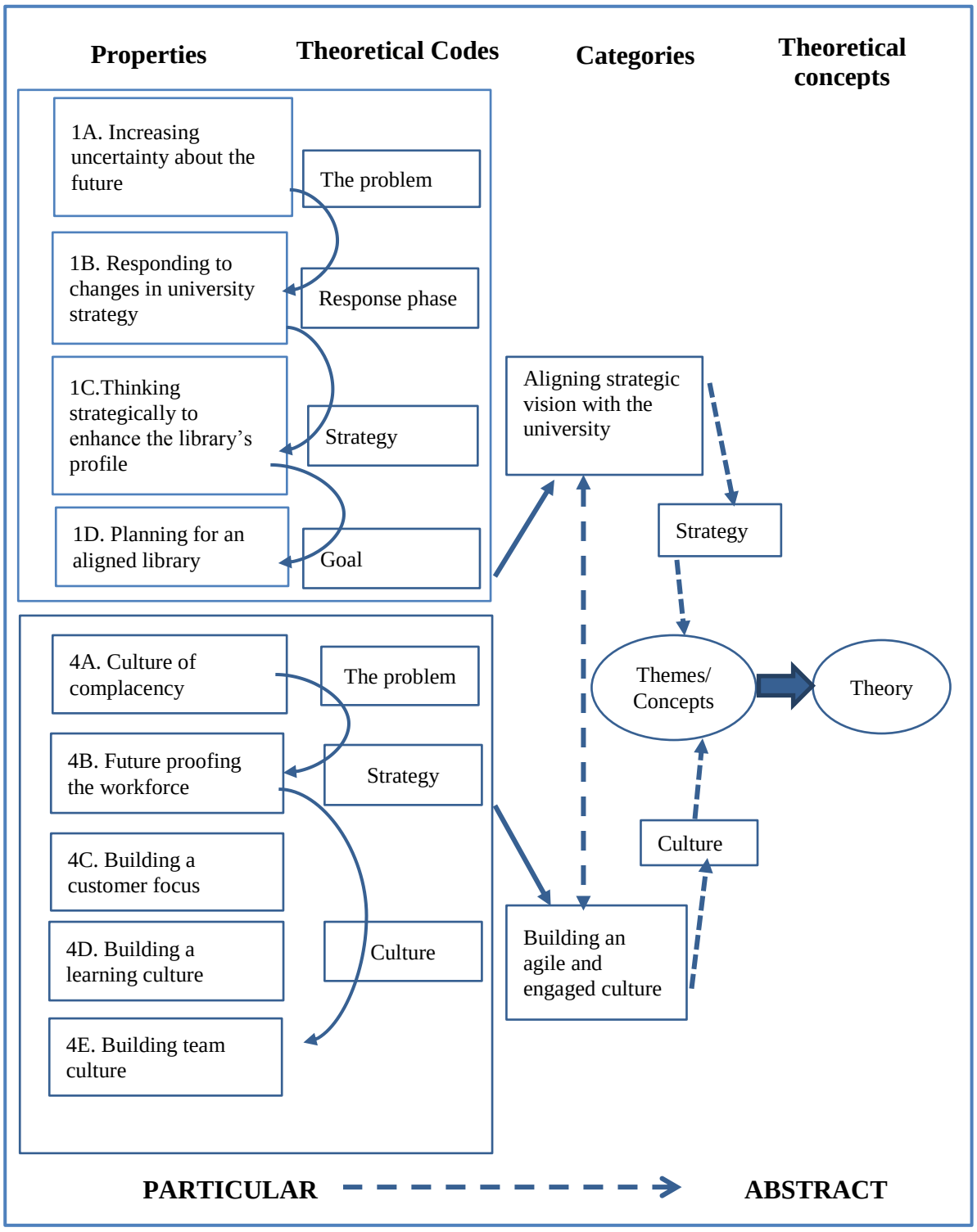

Figure 4.11. Theoretical coding: from properties to categories to theory. Adapted by the author from Saldaña (2013, p. 13).

4.6.5 Sorting Memos

The sorting of memos according to their concepts occurred when the sampling was completed and the categories and properties were saturated (Glaser, 1978, p.116). Each memo was assessed for how it fitted into the emerging substantive grounded theory. The researcher sorted the memos according to similarities, connections, and order of process and was able to delete and add memos (Charmaz, 2014, p. 218; Glaser, 1978, p. 117).

4.6.6 Writing

The memo sorting and theory integration phase was followed by writing the discussion of findings and the final report. As the writing occurred the researcher made more connections between the data and the categories and properties. Coding continued until well into the writing stage because new codes would emerge through the constant comparison of data. By the time the writing was completed, there were 1322 initial codes. However, no new properties or categories emerged. This certified that the categories and properties were saturated.

4.6.7 Checking the Model for Resonance

The theoretical model of the substantive grounded theory and its concepts were then shown to four participants to check for resonance. This phase entailed a request for variation to the ethics approval from the QUT Research Ethics Committee. Approval for the new questions was gained on 28th April 2016 and interviews were performed with four prior participants. The new questions are presented in section 4 of Appendix D. Table 4.10 below presents data about the interviews.

Table 4.10

Interview to Check the Model for Resonance with Participants

Participant code	Date of interview	University type	Interview length (mins)
P2	17-May-2016	University of Technology	22:45
P12	03-Jun-2016	Regional University Network	24:52
P11	06-Jun-2016	Group of Eight University	18:19
P1	07-Jul-2016	United States State University	39:28

Although the participants showed general concurrence with the model, P11, who had been interviewed during the theoretical sampling stage said:

> *If I remember correctly we talked a lot about the restructure that we undertook here. So certainly, looking at this afresh, the one area that I wouldn't be so sure about this as an ongoing model is the reinventing the library. Certainly when we did our restructure – it was about reinventing the library. Moving forward, having gone through that major restructure, all of this makes sense but I would say it is continuous improvement or continuing to make sure the library is relevant.*

P2 also noted that the term *reinventing the library* is a term for *continuous improvement.* The detailed findings in section 5.4.3 allowed for both incremental and transformational change, and therefore the name of Category 2 changed to *Continuously reinventing the library*.

The process of this research is illustrated in Figure 4.12 (opposite). This particular research design draws from Charmaz (2006), but also seeks to ensure a rigorous research process by adding member checking of data by participants after the data collection phase (Guba & Lincoln, 1989, p. 239). The steps coloured orange illustrate the extent to which a constructivist grounded theory is a co-operative and collaborative process between the researcher and participant.

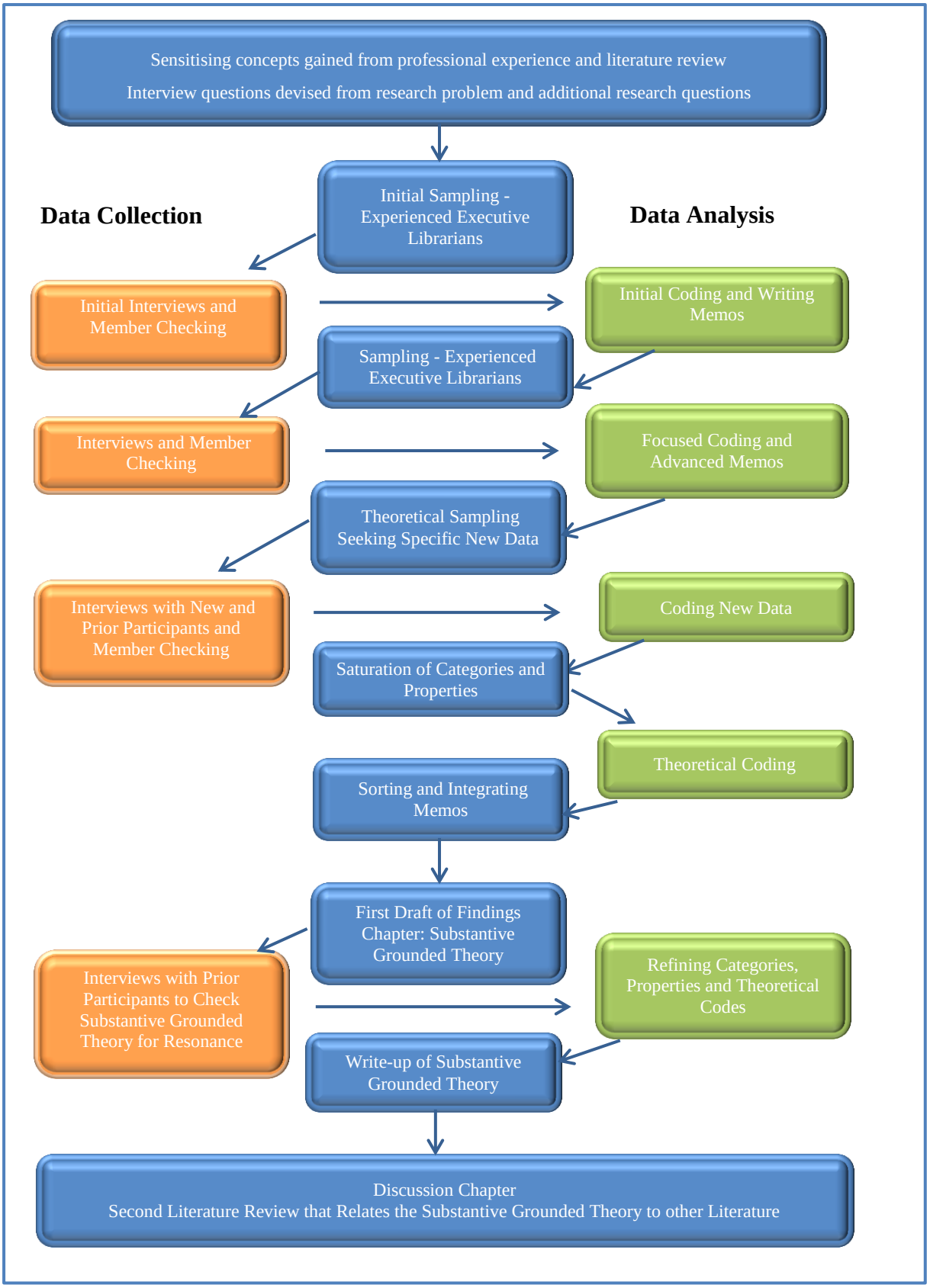

Figure 4.12. Research design flow chart for *How the University Librarian Ensures the Relevance of the Library to Stakeholders: A Constructivist Grounded Theory*. Adapted by the author from Hishiya (2014, p. 40)

4.7 CONCLUSION

The research design chapter presented an in-depth explanation of how the constructivist grounded theory method was enacted throughout the course of this research. This research design began by acknowledging the researcher's prior knowledge of the research area through practical experience as a library manager, although not as a manager of a university library. In a similar way, prior knowledge of management theory in the literature review was acknowledged, although the literature review did not reveal any literature in the substantive area of academic library theory concerning how the University Librarian ensures the library's relevance to stakeholders.

This chapter provided an in-depth explanation of the steps taken to collect and analyse data concurrently through semi-structured interviews, initial coding, focused coding, theoretical sampling and theoretical coding. Chapter Four also demonstrated that the substantive grounded theory was generated through simultaneous activity of focused coding and memo writing. Further interviews enabled checking that the researcher's interpretation of the theory resonated with participants, further demonstrating the co-constructed nature of the substantive grounded theory.

Chapter Five follows and presents the researcher's interpretation of the research findings. The findings chapter introduces the participants and their university context, presents five conceptual categories and the properties that demonstrate the processes behind each concept. Chapter Five also presents the final outcome of the research as an integrated substantive grounded theory. The theory is integrated in a way that shows how University Librarians are ensuring their libraries are relevant to their stakeholders in the face of competition from open access information sources.

Chapter 5: Findings

Chapter Five reports the results of the constructivist grounded theory research procedure as described in detail in Chapter Four. The purpose of this chapter is to present the findings that result from the analysis of the 14 semi-structured interviews with the 12 participants. These findings have also been checked that the findings and the theory resonate with participants (section 4.6.7). This chapter presents an integrated substantive grounded theory as the outcome of the findings. The substantive grounded theory presents the required elements of Whetten's (1989) complete theory as explained in Chapter Three. More importantly, the chapter provides the interpretive elements for a substantive grounded theory (Charmaz, 2014), which is summarised as a visual model in section 5.9.

This chapter provides the detailed answer to the research question, which is restated here:

> How can the University Librarian ensure the relevance of the university library to its stakeholders in the face of competition from open access information sources?

Chapter Five is divided into the following sections:

- Introduction to the University Librarians and their context (5.1)
- The conceptual categories and their properties (5.2 to 5.7).
- The integrated substantive grounded theory (5.8).
- The visual theoretical model of the substantive grounded theory (5.9)
- Conclusion (5.10)

Section 5.1 provides background for each participant, their context, and the time of interview, recognising their multiple realities. This section satisfies the interpretivist aspects of a substantive grounded theory (Charmaz, 2014, p. 231)

Sections 5.2 to 5.7 present the findings and analysis of the interviews as five main conceptual categories. The categories explain *what* is occurring. The categories are then subdivided into properties or processes, and these explain *why* the phenomenon is occurring (Whetten, 1989). These categories also provide the

interpretive component that is necessary in a substantive grounded theory, in describing the multiple perspectives of participants and in making comparisons between university types (Charmaz, 2014, p. 240).

Section 5.8 describes the relationships and explains the causal links between the categories (Recker, 2013, p. 48). This explains *how* the phenomenon occurs (Whetten, 1989) and therefore completes the substantive grounded theory. Finally, section 5.9 provides a summary and a visual model of the substantive grounded theory.

5.1 THE UNIVERSITY LIBRARIANS AND THEIR CONTEXTS

This section introduces the participants (*who*) in the study as University Librarians with experience in maintaining and extending the relevance of their libraries to stakeholders (section 5.1.1). It describes the one year time frame for the interviews from December 2014 to November 2015 (*when*), explaining how this affected the concerns of participants during that year (section 5.1.2). It also provides the background for the universities and justifies the inclusion of United States state system university libraries in the sample (*where*) (section 5.1.3). There is also an introduction to each university type and to the participants from each of these types of universities (sections 5.2.4 to 5.2.8). Section 5.2.9 provides a table of the participants and their universities.

5.1.1 The *Who* Element of the Theory

As described and justified in Section 4.3.1, all participants had significant experience (at least five years) as the University Librarian or they had been employed at a lower executive level prior to their appointment as the University Librarian. Each of the participants had first-hand experience in maintaining and extending the relevance of their libraries to their stakeholders. Indeed, such first-hand experience extended to projects such as restructures and strategic planning that occurred concurrently with the interviews. Therefore they were able to answer the research question in depth.

The research question is restated here:

> How can the University Librarian ensure the relevance of the academic library to its stakeholders in the face of competition from open access information sources?

Biographical details about the University Librarians have been omitted because in a relatively small industry domain such as university libraries, participants can be easily identified. Details about the mode of the Australian interviews (face-to-face or Skype™) have also been omitted in order to obscure the identity and location of the participants' universities.

5.1.2 The *When* Element of the Theory

All participants were interviewed within a one-year time frame. The first participant was interviewed in December 2014 and initial sampling was completed in July 2015. Theoretical sampling began in October 2015, with the final interview taking place in November 2015. This enabled the data to reveal change over a period of time (Charmaz, 2014, p. 33). The main change that was observed over this period of time was that at the beginning of the data collection, Australian university librarians voiced concern about the possible deregulation of university fees (Riemer, 2015). This concern was voiced by Participant 2 (P2) and Participant 4 (P4):

> *Deregulation in the Australian higher education market is a huge challenge and I think a lot of the library staff just don't see how it will impact on them.* (P2)
>
> *I guess the other side for us, in terms of staying relevant and meeting challenges is that we also face the unknown, like other institutions are at the moment in Australia, of not knowing quite which way the government's going to jump, and what the implications might be.* (P4)

Concern about deregulation of the higher education market was only mentioned in passing by Participant 6 (P6) after the proposed legislation was defeated in the Australian Senate in March 2015. Nevertheless, P6 still showed some concern that this may happen in the future:

> *So you know, we've seen this potential deregulation of the higher education sector, and the extent to which that happens is unclear…*

The remainder of the interviews did not reveal any continuing concerns about deregulation.

5.1.3 The *Where* Element of the Theory

In order to produce a midrange theory that satisfies the requirements of a constructivist grounded theory, the sample for this research was deliberately limited

to the public university context. Private universities were excluded from the study. Most of the research participants were from Australia and two participants came from the publicly funded state university system in the United States.

The first American participant was recruited in the convenience sampling stage of the pilot study. This interview produced high quality data which was included in the main study. A second American participant was recruited to add depth to the data for this university type.

The data gained from these interviews were considered to be relevant to this research because Australia has a higher education system that is similar to that of the United States (International Association of Universities, 2015; Marginson, 2002a). According to Marginson and van der Wende (2009) the Australian higher education system is similar to that of the United States because it is characterised by "a high fee high aid mixed public/private system segmented by institutional type in which the public sector commands three quarters of enrolments but non-profit and for-profit private sector models are important" (p.34). In recent years, Australian government policy has determined that Australian universities should copy the cost structures and missions of American universities (Marginson, 2002b, p. 415). Indeed, Marginson (2004, p. 25) claims that Australia sells its higher education to the global market as "America on the cheap".

Further to this, in 2015, Australian universities were faced with the possibility of changes to government policy leading to deregulated university fees (Riemer, 2015). This was causing great concern to a number of the universities (Bastian, 2014, p. 15). The proposed changes to government policy meant that Australian public universities were facing the challenge of an even more competitive market that closely copied that existing in the United States.

The opportunity to compare the Australian public university library with its American counterpart was also important to this research because the higher education economy is globalised (Marginson & Considine, 2000, p. 48; Marginson & van der Wende, 2009, p. 22), and the market is increasingly economically competitive (Marginson, 2004; Marginson & van der Wende, 2009). Moreover, American universities have a heavy influence upon global trends in higher education (Marginson, 2006, p. 2).

The initial sample from Australian universities was deliberately selective, or purposeful, in identifying the range of university settings to explore (Draucker et al., 2007, p. 1137). As far as possible, this research reflected the full range of Australian university types in order to make comparisons between the contexts, and therefore produce a substantial analysis of the data (Charmaz, 2014, p. 33). The four Australian university types examined in this research roughly correspond with the segments identified by Marginson and Considine (2000): s*andstones, gumtrees, unitechs* and *new universities* (p.190). No further detail is provided for the individual universities or their libraries to prevent identification of the universities, the libraries, and the participants.

5.1.4 United States State System Universities

This research included participants from state system universities in the United States, because their public funding system closely resembles that of Australia. The state system universities in the United States are licensed by their state governments. Their standards are monitored by six regional accrediting agencies or associations (International Association of Universities, 2015, p. 4180). Unlike the Australian system, they derive their funding from their respective states, rather than from the federal government of the United States. Each state's higher education system is unique, with the state often operating several types of university system (Salerno, 2004). Therefore, it should be noted that the participants were not necessarily recruited from universities with titles using the term *State University*. The American participants were keenly aware of the state government as their funding source. Therefore, they recognised their responsibility in providing a high value service that assists in producing alumni who contribute to the State. The state system universities are labelled here as *USSU's* and are coded as *USSU-1* and *USSU-2*.

Participant 1 (P1) was the University Librarian of USSU-1. P1 was interviewed twice in this study and was recruited for the pilot study through the recommendation of a supervisor. P1 fulfilled the criteria for the study, participated in academic activity and had collaborated with the Australian library sector. Because of this background, P1 was not only a convenient participant, but was deemed a source of "rich data" (Charmaz, 2014, p. 23). The first interview with P1 took place via Skype™ using the pilot interview protocol and lasted for 51 minutes. Following the completion of ten interviews during the initial sampling phase, P1 was re-

interviewed using the revised interview protocol. This was a face-to-face interview, which was 23 minutes long. During this interview P1 was only asked the main interview question, and spoke with little interruption or prompting. This interview demonstrated that an open-ended approach starting with a single interview question can produce rich data.

Participant 9 (P9) was the University Librarian of state system university USSU-2. P9 was recruited through the snowballing technique of asking P1 for recommendations for participants. This 24-minute interview took place via Skype™. P9 addressed the main question briefly and then each of the related questions.

5.1.5 Australian Universities of Technology

Australian universities of technology have research and teaching strength in vocational and technological areas (Marginson & Considine, 2000, p. 189; Williams, 2010, p. 34). These universities generally consist of institutions that amalgamated after the abolition of the two-tiered system of universities and colleges of advanced education in 1987 (Marginson & Considine, 2000). Most of the universities of technology are members of the Australian Technology Network of Universities (ATN), a grouping that collaborates to achieve partnership with industry and government (Australian Technology Network of Universities, n.d.). They have strong links to industry and emphasise teaching occupational skills (Marginson & Considine, 2000, p. 197). For the purposes of this research, the universities of technology are labelled as *ATN's*, and are coded as *ATN-1* and *ATN-2*.

Participant 2 (P2) was the University Librarian of ATN-1. The interview with P2 lasted 48 minutes. This was the first interview using the revised interview protocol, and P2 answered the main interview question so extensively that only two other questions were asked.

Participant 8 (P8) was the University Librarian of ATN-2. P8 had prepared for and answered each of the questions on the interview protocol and indicated that the library management team had helped in preparing the answers. The interview was 41 minutes in length.

5.1.6 Innovative Research Universities

Innovative Research Universities (IRU) is a network of universities that conduct research and are located in the outer metropolitan areas of capital cities and

in regional areas of Australia (Bastian, 2014, p. 15; Innovative Research Universities, 2015) . Their research activity is often specific to the regions in which they are located and they draw their students from these regions (Bastian, 2014, p. 15). These universities were founded during a major period of expansion in higher education, between 1960 and 1975 (Marginson & Considine, 2000, p. 189). Innovative Research Universities are labelled here as *IRU's* and they are coded as *IRU-1*, *IRU-2, and IRU-3*. IRU-3 was originally classified in this research as a regional university because it was located in a regional area and because of the difficulty in recruiting RUN participants. Later, when P12 from RUN-2 was recruited for the study, this university was then reclassified as an IRU. The reason for the reclassification was because IRU-3 has a strong research focus and because Marginson and Considine (2000, p. 190) place it within their Gumtree category.

Participant 3 (P3) was the University Librarian of IRU-1. P3 was recruited at the suggestion of P2. During this 25-minute interview, P3 answered each of the questions on the interview protocol.

Participant 7 (P7) was the University Librarian of IRU-2. This interview was 42 minutes in length. P7 spoke without interruption about the main research question, and therefore the interview was conversational in tone, with the interviewer only asking for clarification about some issues. The researcher followed this up with the final question "Can you think of anything else that helps your library achieve relevance to your stakeholders?" P7 was also interviewed during the theoretical sampling stage to explore the recent restructure of IRU-2 library. During the second interview P7 was asked two questions. This interview lasted 21 minutes. The two interview questions asked in this interview are specified in Table 4.9 in Chapter Four.

Participant 10 (P10) was the University Librarian of IRU-3. This interview was 35 minutes long, during which P10 answered each question on the interview protocol.

5.1.7 Regional Universities Network

Participants were also recruited from universities in regional areas. The two participants were members of the Regional Universities Network (RUN) (Regional Universities Network, 2015). These universities service the non-metropolitan

populations based around regional cities (Marginson & Considine, 2000, p. 208). Because they often struggle to build a research profile (Marginson & Considine, 2000, p. 202), these universities can be characterised as having student populations that are primarily undergraduate. Their first year cohorts are comprised of large numbers of students that are first in family, mature-aged, or have low SES backgrounds, requiring extra support from the university (Marginson & Considine, 2000, p. 202). Regional universities are labelled here as *RUN's* and are coded as *RUN-1* and *RUN-2*.

Participant 4 (P4) was the University Librarian of RUN-1. P4 was interviewed for 52 minutes. P4 answered the main interview question fully, and then answered each of the related questions. Participant 12 (P12) was the University Librarian of RUN-2. P12 was recruited during the theoretical sampling stage of the research, and at the time of the interview, was approximately half way through a restructuring process. P12 was interviewed for nearly 17 minutes about the library's current restructuring process.

5.1.8 Group of Eight Universities

Group of Eight Universities (Go8) consist of eight research intensive universities (Group of Eight Australia, n.d.). Most universities in this segment are the oldest in their states, giving them an elite status (Marginson, 2004, p. 8; Marginson & Considine, 2000, p. 191). They have an almost unassailable position in the highly competitive higher education market due to their elite reputation (Marginson, 2004, p. 8; Marginson & Considine, 2000). In general, school leavers rate these universities as their first preference for tertiary entry, which is measured by higher entrance scores (Marginson, 2004, p. 8; 2006, p. 11). Marginson and Considine (2000) explain that the value of the higher education is in "the scores of the students who enter, the reputation of the academics who teach them, the success of the university in research, and the labour-market status of the graduates" (p.193). Moreover, Go8's are able to attract more research funding and they can tap into funding from donors and private investors (Marginson, 2006, p. 12). Group of Eight Universities are labelled here as *Go8's* and are coded as *Go8-1, Go8-2,* and *Go8-3.*

Participant 5 (P5) was the University Librarian of Go8-1. P5 was interviewed for 42 minutes. After a lengthy answer to the main interview question, P5 answered the remainder of the related interview questions. Participant 6 (P6) was the

University Librarian of Go8-2. The interview with P6 was 18 minutes long. P6 chose to answer each related question rather than the main interview question.

Participant 11 (P11) was the University Librarian of Go8-3. P11 was interviewed during the theoretical sampling stage of the study and was chosen because of the recent restructure of the Go8-3 library. This interview was 24 minutes long. Like P7 and P12, P11 was asked only two questions.

5.1.9 Overview of the Participants and the Universities

Table 5.1 (below) provides an overview of the participants, their university type and university location. This table shows that the interviews with P1 to P5 gathered data from each university type. Interviews with P6 to P10 gathered more data from each university type in order to add depth to the theory. The interviews with P11 and P12, and the second interview with P7 took place during the theoretical sampling stage in order to collect data where there were gaps in the emerging theory and the properties were thin with data.

Table 5.1

University Type and Location

Participant code	University Code	University type	Location
P1- 2 interviews	USSU-1	State system university	United States
P2	ATN-1	University of Technology	Australia
P3	IRU-1	Innovative Research University	Australia
P4	RUN-1	Regional University Network	Australia
P5	Go8-1	Group of Eight University	Australia
P6	Go8-2	Group of Eight University	Australia
P7 – 2 interviews	IRU-2	Innovative Research University	Australia
P8	ATN-2	University of Technology	Australia
P9	USSU-2	State system university	United States
P10	IRU-3	Innovative Regional University (non-member, but has characteristics)	Australia
P11	Go8-3	Group of Eight University	Australia
P12	RUN-2	Regional University Network	Australia

5.2 THE EMERGENCE OF FIVE CONCEPTUAL CATEGORIES

Five main conceptual categories emerged from analysis of the data. These categories are presented here and are numbered:

1. Aligning library strategic vision with the university

2. Continuously reinventing the library
3. Engaging with stakeholders
4. Building an agile and engaged culture
5. Demonstrating value to the university

The researcher organised the data within these categories to demonstrate a process. The analysis of process helped in defining the main events or phases, and the relationships between them (Charmaz, 2014, p. 245). The processes varied with each category, but in general, they described the problem faced by the university librarian, the response to the problem, the decision-making process, and then the consequence of those decisions (Charmaz, 2014, p. 190).

5.3 CATEGORY 1: ALIGNING LIBRARY STRATEGIC VISION WITH THE UNIVERSITY

The first category is *Aligning library strategic vision with the university*. The participants in this research stressed the importance of ensuring that the vision, goals and strategy of the library were aligned with those of the university. This was an important strategy to the majority of participants and the word "*alignment"* or "*aligning*" was used in preponderance. Other phrases such as "*strategic intent*", "*strategic vision*", or "*linking strategy*" were also used, and their meaning clearly related to the concept of the library aligning its own strategies, vision and goals with those of the university.

This category was important to the majority of participants. Ten of 12 participants mentioned the importance of alignment, and this factor began the discourse in four of the interviews (P4, P7, P8, and P9). This category emphasises the importance of alignment with university strategy. P9, the University Librarian at USSU-2 stressed:

> *Really it comes down to our planning process and we link our library strategic plan with the university strategic plan. That helps inform us of the critical priorities of the university. It also informs the university how we are supporting those critical priorities. So the university strategic plan is critical regarding relevance.*

5.3.1 The Process of Aligning Strategic Vision with the University

The process of aligning the library's strategic vision with that of the university was ordered into properties, which, in this research, are defined as the phases of a process with at least two stages (Glaser, 1978, p. 74). This process is illustrated above in Figure 5.1 (below), as a sequential order, with the arrows signifying the linear processual action taking place (Saldaña, 2013, p. 251). The double-headed arrow between Properties C and D signifies mutual dependency or interdependence, where the properties depend upon each other (Glaser, 1978, p. 76).

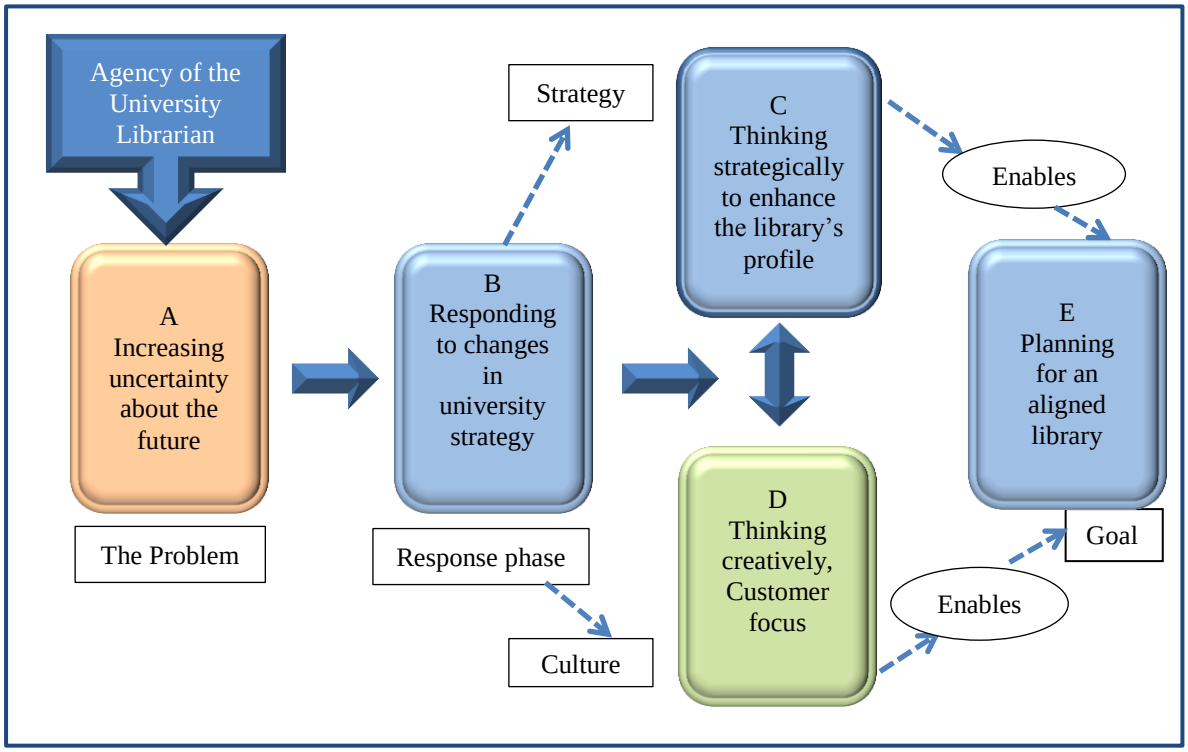

Figure 5.1. The process of aligning library strategic vision with university strategic vision

In the first stage, the University Librarian recognises the problem of uncertainty about the future, which is caused by change in both the external and internal university environment (Property A). The University Librarian responds to the changes in university strategy (Property B). The theoretical code of *response phase* that explains what is happening here belongs to Glaser's process coding family (Glaser, 1978, p. 74). The response requires strategic thinking to determine how the library can enhance its profile by taking advantage of opportunities presented in the university's strategic plan (Property C). The theoretical code of *strategy* that explains this process belongs to Glaser's strategy theoretical coding family (Glaser, 1978, p. 76). Strategic thinking also requires creative thinking and a customer focus (Property

D). Property D belongs to Glaser's cultural family of codes (Glaser, 1978, p. 77). The University Librarian then enacts the opportunities to enhance the library's profile by devising a strategic or operational plan that enables the library's strategic vision and strategy to align with that of the university (Property E). This is the goal or consequence of the creative and customer-focused and strategic thinking activity. The theoretical code of *goal* belongs to Glaser's (1978, p. 77) means-goal coding family.

The relationship between Property A and Property B falls within Glaser's *process* theoretical coding family, where the sequence of the coding means that there is a process of "getting something done which takes time or getting something done over time" (Glaser, 1978, p. 74). Properties C and D are interdependent and the relationship belongs to the interactive family of codes (Glaser, 1978, p. 76). The product of thinking strategically and creatively is the strategic plan. In short, Figure 5.1 shows that planning for an aligned library (Property E) occurs because of increasing uncertainty about the future (Property A).

5.3.2 The Problem: Property 1A: Increasing Uncertainty about the Future

The data relating to the problem of increasing uncertainty about the future emerged from responses to the main question, and also to related interview question three: What do you perceive to be the challenges facing your library at the present time? (Appendix D). All participants in the initial sample referred to increasing uncertainty as a challenge. In many cases, participants would mention a contributing factor and then nominate it as a challenge for the library.

Increasing uncertainty about the future refers to changes that cannot be controlled by either the library or the university. These changes are on two levels: firstly, the changes that are external to the university, forcing the university to change its strategies; and secondly, the changes that are internal to the university community, forcing the library to change its strategies.

The external reasons for such uncertainty, as nominated by participants in this study were:

- The globalised higher education environment
- The deregulation of the Australian higher education market

- Changes in higher education policy
- The economy
- Technological advances changing the information landscape

The reasons for uncertainty within the university itself, according to the participants were:

- Change in strategic focus
- Change to campuses and course offerings

External Change: The Globalised Higher Education Environment

The globalised higher education environment means that universities are competing for undergraduate students and postgraduate researchers in a market that is increasingly competitive. Global rankings such as the Times Higher Education World University Rankings™ have led to greater competition amongst universities to achieve higher rankings, and therefore, higher visibility. The University Librarians were aware of this, as stated by P5:

> *We're number [x] in the world in Times Higher Ed [sic] and that's where we're really seeing our comparators.*

Moreover, Massive Open Online Courses (MOOCS) have created a new challenge for universities, with students now able to complete online courses from prestigious universities (P3, P5, and P6). P6 remarked upon this:

> *...but certainly there is a proliferation of online courses, you know, free courses from the world's best universities.*

External Change: The Deregulation of the Australian Higher Education Market

At the time of the early interviews, Australian librarians were faced with the prospect of deregulation of the higher education industry. Under a deregulated higher education market, universities would have been able to set their own fees for students. This change was likely to lead to greater competition for undergraduate and research students, leading to greater pressure on universities to perform financially. Deregulation of higher education was expected to destabilise the job security that had characterised the academic library sector, as P2 remarked:

Higher ed [sic] is such a secure job, but the challenge is that in two years' time it could not be a secure job.

External Change: Changes in Higher Education Policy

While higher education deregulation did not eventuate during the course of the research, other changes in higher education policy in Australia were perceived to have forced change upon academic libraries (P2, P4), as stated by P2:

We as a university are moving into a dilemma because from a business perspective, undergraduate students are problematic in the new government environment for funding, and we as a library do need to focus more on our staff and researchers because they are bringing in the dollars in that side of the university. And so it is one of the things that the library staff are finding it slightly challenging to figure out how they service staff and researchers better, because there hasn't really been the dollar imperative.

External Change: Changes in the Economy

The American University Librarians nominated uncertainty as a major challenge. P1 talked of increased uncertainty, and P9 also referred to increased uncertainty due to the linkage of the university's funding to the price of carbon fuel exports. Indeed, P9 was forced to make large budget cuts due to the global financial crisis as stated:

So, we, over a ten year period have tripled our collection budget, which is really good, but during that time frame, there are years where our budget was cut in half and then restored, and cut and then restored. So really the fortunes of the library – I should say the fortunes of the university are linked deeply with the price of oil, the price of natural gas and coal exports. We've had some really good years. We've had some really horrible years.

External Change: Technological Advances Changing the Information Landscape

The information landscape is continually changing. P1 called this the "*dynamically changing information landscape".* P5 noted the challenge of keeping up with technology. This means that the technologies required in providing and making available various types of information are continuously changing. Moreover, P6 emphasised the challenge of keeping up with user preference for technology such as Google™:

> *The second [challenge] is that we've invested heavily in these information resources, digital information resources, and, you know, technology has enabled us to deliver much of our collections online, and we make considerable investment in those electronic resources. But Google™ really still remains the tool of choice for our users and we know that through various surveys and evidence-based practice that's been undertaken.*

P7, P8 and P10 remarked upon the kinds of changes in information technology, such as digital learning technology, e-books, virtual reality, mobile technologies and game technology. Indeed, the way in which a number of libraries collaborate closely with the technological services departments of the universities demonstrates the extent to which technological innovation is a challenge for university libraries (P2, P3).

Internal University Change: Change in Strategic Focus

Changes in the higher education environment have led to internal university policy changes, which have required the library to respond. The participants identified changes in their university's strategic focus (P1, P4, P5, P7, and P8). Moreover, the University Librarians were also aware of the possibility of future changes in strategy and policy (P4, P5, and P7). In general, all participants mentioned the change of focus of universities from simply teaching and learning of undergraduate students, to a focus upon research, as P4 stated:

> *... With the focus in recent times of moving from focusing on teaching and learning to the focus on research and research support which has been a big one for libraries.*

Internal University Change: Change to Campuses and Course Offerings

The changing focus of universities has brought change to the campus, and therefore, to the library. This has manifested in rapid change, noted by P4, whose university context involved rapid growth in the university, with the frequent addition of entire faculties and courses. P4's situation was characterised by the need to set up libraries on new campuses or remote study centres for students who cannot study on the campus.

On the other hand, P5 and P8 noted the more subtle changes of the addition of courses and units. Some librarians observed the changes in stakeholder needs (P4),

and also that the stakeholders themselves sometimes do not know their own needs until a product is offered to them (P7).

5.3.3 Response Phase: Property 1B: Responding to Changes in University Strategy

Property 1B: Responding to changes in university strategy encompasses the library's response to the changing university environment. The library alters its own strategy in accordance with changes in university strategic planning and priorities. All university librarians (100 percent) in the initial sample remarked upon this property. The participants referred to the university strategic plan as "*strategic directions*", "*strategic plans*", "*focus*", or the university administration directing the library (P1, P2, P3, P4, P5, P7, P8, P9, and P10). In some cases, the business unit or division within which the library sat was directing the library (P2, P3, and P7). Therefore, according to the participants it was important to respond to changes in university strategy by:

- Showing awareness of the university strategic plan
- Responding to the directives of the university administration
- Scrutinising university strategic plans for core priorities.

Showing Awareness of the University Strategic Plan

Awareness of the university strategic plan was considered to be very important by P2, P3, P7 and P9. University strategic plans are usually university blueprints presenting the overall mission or vision of the university, its goals, and the strategies to achieve those goals. They are usually to be actioned over five or six years (P2, P3, P6 and P9). The university strategic plan was regarded by P9 as critical for relevance. This observation was reiterated by P3:

> *I guess the other thing that we do is we're very much involved and aware of the university's own strategic directions and strategic priorities and we look to align our services and our service model with that so that we ensure that we are relevant and that we are contributing to the overall mission and strategic direction of the university.*

Responding to the Directives of the University Administration

Therefore, some of the participants referred to being directed by the university or the Vice-Chancellor to address priorities (P8, P10), or stated that they were

presented with targets (P10). Some of the participants stated that they were directed by their own business unit, division or department, and that they acted upon their own divisional plan. The divisional plan presents the library with goals and strategies for alignment (P2, P3, and P7).

Participants observed that another major instigator of change was the university restructure (P2, P3, P5, P7, and P9). The university restructure is often preceded by changes to university strategy (P5) or by funding cuts to the university caused by outside economic factors (P2, P9). For some, the funding cuts provided unexpected benefits. P9 in particular noted how funding cuts made fewer staff work harder to achieve the same outcomes:

> *Surprisingly, even though we are down about 16 percent in our staff, we are probably more efficient and effective behind the scenes than we ever have been. That's because those budget cuts really forced us to look at our operations. It's a great story. I wish I could take credit for it.*

For others funding cuts created opportunities for restructuring staff skills:

> *So therefore, again, from a business perspective I need to maintain staff that are [sic] of the highest quality and of the highest level and of the most relevant for my library. The challenge is going to be when the cuts come [due to deregulation], that library staff will not see it coming, even though they probably will be told and that there will be people who don't understand that by not maintaining their skills, by not being ready for change, and by being very traditional, that in certain organisations like ours that are technology focused, they're going to struggle to maintain their positions.* (P2)

Some of the University Librarians said it was easy to feel overwhelmed by such change (P1, P3). Yet the consequence of non-response to such change, according to P8, is dire:

> *…and if we don't respond we're seen as an out rider. You know, an independent sort of organisation that just goes its own road and you become irrelevant, and they do something about you.*

Scrutinising University Strategic Plans for Core Priorities

The solution to changes in university priorities is to scrutinise the university strategic plans and concentrate on the core priority areas of the university that inform

and involve the library (P1, P2, P3, P4, P6, P7, P9 and P10). P6 and P9 emphasised the importance of this scrutiny:

> *…and we've got groups of staff at the moment tasked with looking at the core priority areas of the university.* (P6)

> *Yes, so the university conducts 6 year plans. We employ that planning process in our early conversations. How I do that at this university? The university will develop a plan and the university plan informs us.* (P9)

5.3.4 Strategy: Property 1C: Thinking Strategically to Enhance the Library's Profile

In response to the university's strategic vision, goals and planning, the University Librarian and the library's senior staff focus upon how the library can contribute to the university's goals while enhancing the library's profile. P9 and P10 noted that they begin this phase by ensuring senior management are focusing upon strategic thinking, where they consider how to support the university's strategic vision and goals (P9, P10). For some of the participants, strategic thinking entailed embracing strategic priorities as opportunities that will enhance the library's profile (P1, P2, P7, P9, and P10).

P10 took a different approach recently:

> *We adopted a slightly different approach last year. Where some of the senior managers - we spent probably about three or four days, over a period of time just really focusing upon strategic thinking.*

Focusing on strategic thinking required the library executive with its managers to consider the challenges of the university's plan (P9 and 10), and to consider them as opportunities that can be taken by the library that will enhance its profile and visibility. P2 pointed out:

> *… I do want to take on opportunities that can be relevant to the library and add them in to our portfolio.*

In fact, this approach was taken by a number of librarians (P1, P2, P5, P6, P7, P8 and P10). For P5, this approach was necessary "*so that we can be seen as relevant for the new business lines that the university's pursuing"*. P6 and P8 expressed this below:

> *With us, in trying to develop our reputation and identity within the university, and it's helped to go outside as well, is to get a reputation as an experimenter. I think we're good at trying new things; constantly trying new things.* (P8)

> *So the university library's brief is becoming broader than it has been before. We're being expected to contribute to new areas, which is a great opportunity for libraries* (P6)

P1 also suggested that a systemic approach to identifying opportunities for maintaining relevance is necessary.

Determining How to Support the University's Core Priorities

The University Librarian and the executive team assess the adequacy of the current library services in supporting the core priorities of the university. More importantly, the University Librarian and the executive team strategically try to identify new opportunities for the library to serve the university. This requires the identification of the university's new strategic goals, and then defining how the library can support the university strategies given the constraints on skills and budget. All university librarians in the entire sample (100 percent) alluded to this phase in ensuring alignment with the university.

P7 frequently referred to this as "*adding value*" to the university and P6 stated "*and this is value to the university's core priorities*". This process involves the following strategies:

- Identifying opportunities that add value to the university
- Adding value: maintaining and refreshing core library functions
- Adding value: supporting university engagement strategy
- Adding value: supporting university teaching and learning strategy
- Adding value: supporting university research strategy
- Considering the impact of library initiatives on university strategy

Identifying Opportunities that Add Value to the University

Some participants stressed that their role and responsibility was one of identifying or assessing new opportunities and directions for the library, in order to add value to the university (P1, P7, and P10). The phrase "*adding value to the*

university" was used on several occasions by P7. It was also phrased by P1 as being "*valuable campus contributors*" (P1) or delivering "*impactful outcomes*" (P1). P10 expressed this as delivering "*the best impact or perceived value to the institution*". P7 pointed out that maintaining the library's relevance was about:

> *Making sure that we look at where we can add value. So it's about having strategies which align with the university strategies, but also strategies that are going to capitalise on things that are happening in the environment where the library can add value.* (P7, interview one)

How does the library add value to the university? Firstly, it assesses whether the library can realistically perform extra value-adding functions (P2, P7). P7 remarked:

> *We always have to assess them carefully because you can't take on everything, and you wouldn't want to take on everything.*

The library assesses its own areas of expertise and how that expertise can assist in adding value to the university (P1, P2, and P7). P1 stated that the purpose of a new initiative must be identified:

> *Since 2008 I have implemented in my workplace a systems design initiative which from the outset, requires that co-participants or colleagues identify the purpose of the system or systems within the larger organisational context.* (P1, interview two)

The library's areas of expertise, as identified by P2 and P7, include communications, customer support, and information management, providing a central service location for the university, and providing information literacy skills to students and staff.

Adding Value: Maintaining and Refreshing Core Library Functions

The first way in which the participants perceived their libraries added value to the university was by maintaining and refreshing core functions (P3, P4, P6, P7, P8, and P10). P10 referred to this as "*refreshing our services*". This is still a requirement for libraries, according to P8:

> *Against all that [new services] we need to balance it with what are the core needs and expectations. You know, things that libraries have always been expected to do.*

These traditional core functions and services include the requirement to curate information (P3). This refers to curating the library's database subscriptions, but also to resources that are freely available through open access. The library functions to enable discovery and access to that information (P3). The participants indicated that they are doing this now by ensuring they invest heavily in the technology that ensures stakeholders can access online digital resources (P1, P5, P6, and P8). P2 from ATN-1 also emphasised the technology focus of her library. However, P7 was aware that the technology must be relevant to stakeholders:

> *And we don't just, for example, grab any new technology because that technology has to be relevant.* (P7, interview one)

Some libraries, such as Go8-2 are still required by faculties and administration to maintain print collections of journals in particular (P6). P4 was aware that other academic libraries were required to maintain print runs, but was thankful that the faculty of RUN-1 agreed to a policy decision to only collect online journal subscriptions.

Most of the participants' libraries were also providing and enhancing traditional library services by providing spaces for stakeholders (P2, P5, P6, P8, P11, and P12). For example, P5 had installed a new art gallery space and P6 of Go8-2 had recently provided space for a major administrative university project. The demand for traditional silent study spaces was still strong, as specified by P2 and P8:

> *To provide core study spaces, and I mean silent study spaces – a constant expressed desire from our students.* (P8)

The libraries were also adding repurposed spaces as P6 emphasised:

> *We have physical spaces which again probably provide libraries with a huge opportunity in terms of our physical spaces. Certainly here at this university, they're increasingly popular with students. It's a new service I think to the extent that we're doing more interesting things.*

Less traditional library spaces included group spaces (P8), gallery spaces (P5, P8), and new spaces for creative activity such as Makerspaces (P8, P12), games rooms (P8) and media editing and production suites (P8). University libraries also perform a service of providing cultural and scientific awareness through art exhibitions (P5) or curating exhibitions of research activity (P8, P10).

Adding Value: Supporting University Engagement Strategy

The second way in which the University Librarians perceived that their libraries add value was through supporting university strategy of engagement with stakeholders (P3, P4, P5, P6, and P7). Engagement refers to interaction, communication, collaboration, networking or relationship building with stakeholders.

P5 of Go8-1 stated that the University Librarian's role was very broad, encompassing the university's art galleries. For this reason, the Library of Go8-1 sat within the area of Engagement in the university organisational structure. Both P5 of Go8-1 and P11 of Go8-3 employed staff in areas of engagement such as marketing and fundraising. P6 of Go8-2 also saw engagement as important and anticipated the Council of Australian University Librarians (CAUL) contribution to an engagement framework. P3 stated that engagement with stakeholders was the library's main strategy for maintaining and extending its relevance. P7 also saw the library as contributing to student engagement and retention of students by providing support to students who are in their first year. P4 commented on the nature of the university's first-year year cohort as primarily first in family and low socioeconomic status (SES), and therefore the library provided an important role in supporting these students. P12 also envisaged that RUN-2's library restructure would be focused upon engagement and collaboration.

Adding Value: Supporting University Teaching and Learning Strategy

The participants also perceived that their libraries added value to the university through providing support for the university's teaching and learning strategy. The importance of this as a strategy was reflected in the number of participant comments and the number of services provided (P2, P3, P4, P5, P7, P8, P10 and P11). P7 stated:

> *We realise that those things change over time so we are continually evaluating, both our services and the collection, to make sure that they're all relevant to the needs, to the actual curriculum of the university and to the strategies again.* (P7, interview one)

Library participation in teaching and learning was reflected by the library presence on university learning and teaching committees (P2, P6), curriculum support, standards, or transformation committees (P2, P4, and P5). For example, P2 mentioned the library's presence on a number of relevant university committees:

> *Things like student success and retention, first year experience, equity, I'm just trying to think of a range of others - the Curriculum Standards Reference Group, which is the overarching committee that reviews all curriculum [sic] in the university. So, for example, I sit on that committee.*

Support also extends to adding learning support programs for maths, science and IT (P2), building the academic skills advisory service (P2, P7) and involvement in curriculum transformation (P10).

The move to online and blended learning within universities has also led to the requirement for libraries to teach "*new literacies*" (P7, P8). New literacies involve bringing together different literacies such as information and computer technology (ICT) literacy, information literacy, learning styles and media literacy. P7 saw the purpose of teaching new literacies as a way of skilling students for university, but also for the workforce, and specifically mentioned her plans to provide a new digital literacy module that can help first-year students to understand the university website and online learning system. P7 also suggested changes in traditional information literacy teaching, by embedding digital literacies into the curriculum:

> *For the library this means moving from the more traditional classes that are done in the first week of semester each year and teaching hordes and hordes of students in that first week, with not much relevance to what they're actually learning; the content of their curriculum. And instead, embedding it in their curriculum so that as they come to a point where they, for example, they have to do an assessment task, that it will be an online tutorial for them which says "Right, so your assessment task says that you have to find two pieces of research on this topic. This is how you go about it".* (P7, interview one)

Nevertheless, P4 noted that the library at RUN-1 still needed to provide support for undergraduate students because of student demographics. P7 also observed that first year students required greater library support. Other forms of teaching and learning support included providing technology support for both faculties and students (P8). For example, the library of ATN-2 provided Makerspaces and a video production and editing suite for students (P8). P5 provided support for lecture capture and MOOCs. P8 provided English language assistance to support the students who speak English as a second language.

Adding Value: Supporting University Research Strategy

Finally, the research participants perceived that their libraries add value to the university by contributing to university research strategy. Four university librarians specifically referred to the provision of research support as an important field where the library adds value (P2, P4, P5, and P10). According to P10, research support was an imperative for libraries as universities seek to enhance their research visibility. Therefore, according to P10, the purpose of the library was:

> *… to augment the research endeavour. Not just support it, but through our professional capability, augment it; make it better; make it stronger.*

University libraries were servicing the needs of researchers in many ways (P2, P3, P4, P5, P6, P7, P8, P10, and P11). P10 had established an outreach team for researchers, and P2 explained that the number of staff on the research support team had risen steadily in recent years. The participants revealed that university libraries were supporting research in a number of ways: institutional repository management, scholarly communication support, research data management support, and assisting the university in reporting research outputs to government bodies.

P2, P3 and P10 discussed the importance of institutional repository management. Many of the participants indicated that their universities had open access policies, mandated by the university (P8, P10). These open access policies required researchers to deposit their research in the university repository (P3). The library's important role in open access advocacy encouraged researchers to use this service (P8). P2 claimed "*in terms of repository management, data management we are absolute leaders*". P8 also voiced the importance of this strategy:

> *Open access advocacy is huge for us at the moment. We have an open access policy, an open access mandate within the university. We wrote and sponsored that in the library. So, we see ourselves as responsible for making people aware what open access is, promoting it, and facilitating it as advocates within the university community.*

Moreover, the participants reported that libraries were involved in helping academics and researchers to publish. In many universities, this is known as scholarly communication. University libraries have undertaken an important role in finding new business models for publishing and scholarly communication (P3). Libraries provide support and advice to individual researchers about where to

publish, and their citation impact and bibliometric data (P3, P4, P5, P8, P10, and P11). Indeed, the increasing demand for research impact analysis was being met by library services (P4), and P10 reported that IRU-3 library was moving towards providing technology for mobile impact analysis reports. P5 has restructured for the recent requirement for impact analysis reports:

> *Some of the restructuring that I've done over the last couple of years have been to highlight what we do for research and also to develop some new services whereby we do reports for academics about their publications output and how they're tracking.*

Along with this, the participants reported that university libraries were providing research data management support for the university (P2, P4, P6, P7, P8, and P10). P7 explained:

> *The University has a research data management policy which was put in place before I came, but it actually hasn't been activated. There are no procedures for it. It was a policy that was put up to meet the Australian Code of Conduct for Responsible Research…. So now we are in the middle of taking responsibility for research data management and running a university-wide committee which will develop procedures and guidelines and oversee the implementation of research data management.* (P7, interview one)

For P10, research data management was in its infancy:

> *We also have collaborated with ANDS [Australian National Data Service] in terms of research data management. That's an area that we need to pay more attention to. It's an area that we don't have a lot of capacity in at the moment. We need to build that capacity. We're now in the process of being – we have a representative role on an institutional research data management project group to look at how we could adopt an institutional approach to, for the more effective management of research data. That's still somewhat in its infancy.*

University libraries have also been adding value to universities by quantifying the university's research outputs and providing analysis of those outputs to the university (P10). Thus, they are supporting the university's mandatory reporting requirements. P4, P7, P10 and P11, in particular, reported managing Higher

Education Research Data Collection (HERDC) for the University, while P10 and P11 reported managing Excellence in Research for Australia (ERA) statistics as well.

Participants indicated that university libraries were also educating researchers on data management plans (P8). Such has been the impact of library efforts in providing research data management that P2 reported securing external funding to advance in research data management.

Considering How Value Adding Strategies Promote the Library

P9 and P10 stated that the library considered how its support decisions can impact the university and thus inform and promote the efforts of the library to the university administration:

> *We also consider how this might offer a new way of cementing and promoting the library's unique contribution to the research endeavour, for instance.* (P10)

5.3.5 Culture: Property 1D: Thinking Creatively and Being Customer-Focused

A number of the participants recognised the role of creative thinking in strategic planning. P1 used the creative ideas of students to reimagine library services, and P8 gained ideas from student interns, while P12 approached students for creative ideas about their view of the library of the future. P9 also praised the creativity of staff in coping with staff cuts. P5 also noted the creative and quirky ways in which the library used social media to engage with students.

The customer-focus is necessary for the library to be engaged and responsive to the university's strategic goals. In short, the university is a major stakeholder or customer for the library. Creative thinking and customer focus are both properties of Category 4: Building an engaged and agile culture, and therefore the data is presented in sections 5.6.4 (Property 4C) and 5.6.7 (Property 4F). However, the summary of the data is provided below in Table 5.2.

5.3.6 Goal: Property 1E: Planning for an Aligned Library

The next phase in aligning the library's strategy is to achieve the goal of a strategic plan. Planning was referred to by eight participants in the initial sampling stage and by P11 during theoretical sampling (P1, P2, P3, P4, P6, P8, P9, P10, and P11). P8 inferred that planning goes into their operations: "*Libraries tend to do a lot*

of planning" (P8). Planning was regarded as critical or essential by three participants (P2, P6, and P9), and as stated by P6:

> *I think, you know, what is really critical is planning. We've undertaken, well, we're undergoing a really significant planning exercise at the moment where we're putting those challenges at the core of what we see as our future strategies for the next five years.*

The library achieves the goal of aligning its own strategy with that of the university by following the processes of:

- Documenting the library plan based upon the university plan
- Taking time for the process to occur
- Informing the university of library progress

Documenting the Library Plan Based Upon the University Plan

The strategic plan, in general, replicates that of the university. P9 talked about replicating the university strategic plan in the library. P11 also stressed:

> *We have a formal strategic plan. We did a new plan shortly after I came on board. The library's strategic – the library strategy. It was an inclusive process that involved stakeholders and we deliberately and logically aligned it with the university's strategic plan to make sure we were aligned.*

The library strategic plan involves the development of the vision statement (P10), and from that adopts goals (P1, P10). According to P10, the library used the university strategic plan:

> *…to look at developing some anchors in terms of "what are the key goals that the library will then adopt". We have four key goals at the moment. One is "Open 24/7", "Augment research", "Augment teaching and learning", and "Transform engagement with information".*

The library then adopts strategies for achieving those goals (P1, P10). P2 mentioned succession planning, workforce planning, and also planning for facilities refurbishment. The strategic plan also includes measurement indicators. Libraries are able to assess their contribution to the university goals by setting targets and key performance indicators (KPI's) that set a benchmark for measurement (P3, P4, P6, P9, P10, and P11).

P1 and P9 pointed out that the library strategic plan is revised annually. Other participants stated that the library also has annual operational planning that includes KPI's (P3, P6, P10, and P11). P11 stated:

> *We also do annual operational planning and that does include KPI's that we develop. We develop them looking at the university's KPI's and operational plan.*

Taking Time for the Process to Occur

P9 stressed the necessity of allowing time for the process to occur, which is usually 18 months. In P9's case, planning was an iterative process, with the plan going back and forth between library and university administrators. P10 made the comment that time is required because a number of projects necessitated collaboration across the university.

P10 remarked upon taking one year, as a "*year of learning"* to test the capacity of the library to achieve its goals:

> *This year is our "Year of learning", which is our theme, and so we have a number of projects underway to test whether we have the capability or the capacity within our organisation to move in new and different areas against those key goals.*

Informing the University about Progress

Importantly, P9 stressed the need to inform the university about the library strategic plan. This allowed the library the opportunity to report on progress on goals and their impact on university strategy. Moreover, P9 stressed the need to communicate the library plans in terms understood by university administrators.

> *It also means that we need to use terminology so that when we talk about library instruction we really need to talk about student success and retention because those are university priorities and that is the language that the university uses.*

5.3.7 Summary of Participants' Multiple Perspectives

All participants expressed the importance of the strategy of aligning strategic vision with the university. P12 spoke the least about this area because the library instigated its own change project upon the arrival of a new Pro Vice Chancellor.

P1 reflected upon this strategy, but pointed out that USSU-1 is unique as an institution and P1 must scrutinise the strategies of three institutions:

> *We serve three institutions. We can't simply align to a strategic plan. We have to be attentive to the trends and directions of the three institutions.* (P1, interview two)

Closer scrutiny of the data in Property 1A: Increasing uncertainty about the future shows that P4 from RUN-1 articulated much more concern about this problem than the other participants. The major influencing factor for this concern appears to be the rate of rapid growth in the university and its region. All participants in the initial sample referred to the library's response to changes in university strategy (Property 1B: Responding to changes in university strategy) although by far, P9 from USSU-2 made most comment on this subject. It is possible that the reason for P9's attention to the library's response is because of the major staff cuts forced upon USSU-2 by external events. Participants P7 and P10, from IRU universities, make the most contribution to the Property 1C: Determining how to support university strategy. Property 1E: Planning for an aligned library features less in the interviews, but the majority of participants made comments about strategic planning.

Table 5.2 (below) provides a visualisation and summary of the data as provided in this section (5.3). It shows how the University Librarians from each of the university types perceived their challenges, the responses to the challenges and then the planning involved in aligning the library's vision and goals with those of the university.

Table 5.2

The Response of Participants: Category 1: Aligning the Library's Strategic Vision with that of the University

PROPERTIES	USSU	ATN	IRU	RUN	Go8
1A: Uncertainty about the future	*Uncertainty about the future (P1)			*Uncertainty about the future (P4)	
1A: External change	*Economic change (P9)	*Change in higher education policy (P2)	*Global competition (P3)	*Change in higher education policy (P4)	*Global competition (P5, P6)
1A: Change in information landscape: Technology	*Change in information landscape (P1)	*Change in information landscape (P2, P8)	*Change in information landscape (P7)		*Change in information landscape (P5, P6)
1A: Internal change	*Change in university strategic focus (P1)	*Change in university strategic focus (P8) *Subtle change in courses (P8)	*Change in university strategic focus (P7)	*Change in university strategic focus (P4) *Rapid change in courses (P4)	*Change in university strategic focus (P5) *Subtle change in courses (P5)
1B: Responding to changes in university strategy	*Awareness & scrutiny of university strategic priorities (P1, P9)	*Awareness & scrutiny of university strategic priorities (P2, P8)	*Awareness & scrutiny of university strategic priorities (P3, P7, P10)	*Awareness & scrutiny of university strategic priorities (P4)	*Awareness & scrutiny of university strategic priorities (P5, P6,P11)
1B: University directives		*Responding to university directives (P8)	*Responding to university directives (P10)		
1B: Divisional plans		*Responding to divisional plans (P2)	*Responding to divisional plans (P3, P7)		
1B: University restructures	*Responding to university restructures (P9) *Restructure forced library to be efficient (P9)	*Responding to university restructures (P2) *Restructure can lead to better staffing fit (P2)	*Responding to university restructures (P3, P7)		*Responding to university restructures (P5)
1C: Thinking strategically to enhance the library's profile	*Embracing opportunities to enhance library profile (P1, P9)	*Embracing opportunities to enhance library profile (P2, P8)	*Embracing opportunities to enhance library profile (P7, P10)		*Embracing opportunities to enhance library profile (P5, P6)

PROPERTIES	USSU	ATN	IRU	RUN	Go8
1C: Adding value to the university	*Contributing to state economy and society (P1,P9)	*Contributing to university profile (P2, P8)	*Contributing to research profile (P3, P7, P10)	*Contributing to the region (P4)	*Contributing to university's global ranking (P5, P6)
1C: Maintaining and refreshing core functions	*Delivery through technology focus (P1)	*Delivery through technology focus (P2, P8) *Providing silent and repurposed spaces (P2, P8)	*Delivery through careful investment in technology (P3, P7, P10) *Curating information (P3)	*Delivery through technology (P4) *Providing repurposed spaces (P12)	*Delivery through heavy investment in technology (P5, P6, P11) *Providing repurposed spaces (P5, P6) *Print resources(P6)
1C: University engagement strategy		*Collaboration - departments and faculties, feedback, committees (P2, P8)	*Student support; liaison work; multiliteracies; engaging with donors (P3,P7)	* First year student support; liaison work (P4)	* Collaboration; Employing students; surveys; marketing/fundraising staff (P5, P6, P11)
1C: University teaching and learning strategy		*Committees (P2) *New literacies (P8) *Technical support (P8)	*Committees *New literacies (P3, P7, P10)	*Committees *Liaison with faculties and academics (P4)	*Committees (P5) *Liaison with faculties * MOOCS, lecture capture (P5,P6, P11)
1C: University research strategy		*Open access repository management (P2, P8)	* Open access repository management (P3, P10)	*Research support with existing staff (P4)	* Open access repository management (P5, P11)
1C: Scholarly publications			*Scholarly publication support (P3, P10)	*Scholarly publication support (P4)	*Scholarly publication support (P5, P11)
1C: Research data management		*Research data management (P2, P8)	*Research data management (P7, P10)		*Research data management (P6, P11)
1C: Reporting requirements			*Supporting reporting requirements (P7, P10)		*Supporting reporting requirements (P11)
1C: Promotional considerations	*Promoting library value-administrators (P9)		*Promoting library value to administrators (P10)		

PROPERTIES	USSU	ATN	IRU	RUN	Go8
1D: Thinking creatively	*Encouraging creativity in staff (P9) *Listening to creative ideas of students (P1)	*Using ideas of internship students (P8)		*Listening to creative ideas of students (P12)	*Creative and quirky promotions for engaging with students (P5)
1D: Customer-focused	*Customer focused service (P1) *Responsive, flexible, agile (P1)	*Customer focused service (P2, P8) *Responsive, flexible, agile (P2, P8)	*Customer focused service (P3, P7, P10) * Responsive, flexible, agile (P10)	*Customer focused service (P4, P12) *Responsive , nimble, flexible (P4	*Customer focused service (P5)
1E: Planning for an aligned library	*Annually revised library strategic (P1, P9)	*Library brief strategy document (P2) Planning (P8)	*Annually revised library strategic plan (P10) Annual operating plan (P3)		*Library strategic plan (P6, P11) Annual operating plan (P6, P11)
1E: Taking time	*Iterative process between library and administrators (P9)		*"Year of learning" to test capacity to achieve goals (P10)		
1E: Informing university of progress	*Reporting to university on progress (P9)				

5.4 CATEGORY 2: CONTINUOUSLY REINVENTING THE LIBRARY

The category of *Continuously reinventing the library* is an in vivo code that emerged from the interview with P6, who spoke of reinventing the core notion of "*what is a library*?" P6 highlighted this as the first challenge for academic libraries in stating several times:

> *I think the first challenge is the fact that the kind of core notion of what is a library is being challenged. The challenge is a reinvention test... So the issue for libraries is that the core the notion of what is a library is the printed book… That's sort of the first challenge I see and that's the reinvention of the core of what is the library.*

The necessity of reinventing the core notion of "*what is a library*?" was central to the thinking of the majority of the University Librarians in this sample (P1, P2, P3, P4, P5, P6, P7, P8, P10, P11 and P12). This concept was articulated by participants in various ways. For example, P1 observed:

> *…we have incrementally changed our vision of our organisational roles on campus and in fact our place within the higher educational institutions that we serve.* (P1, interview two)

P2 stated on several occasions that the library does not do "*traditional library"*. This was also phrased by P7 as *"trying to expand our horizons beyond the more traditional things that we do"* (P7, interview 1). P12 began a library restructure by asking of stakeholders "*In 2022, what should the library look like*?", and telling the library staff "*we're moving from this state to a completely new state that we will design ourselves, but we're not having any hangovers from the last state"*.

P8 talked at length about the number of non-traditional things the library was doing, using the phrase "*trying new things*". P10 articulated this as reshaping or recasting the organisation. Most of the participants talked about the importance of innovation and technology, while also stating that they still have to provide the traditional or core services of the library (P5, P6, and P8).

The phrase *continuously reinventing the library* succinctly encapsulated the concerns of several of the participants who were conscious that many people are unaware of the crucial role of library in the current higher education environment and regard libraries as somewhat passé (P3, P4, P5, and P6). These participants recognised the need for the library to overcome common but inaccurate perceptions about the role of the library. P6 noted:

> *Libraries have drastically changed in the last ten years, but I don't think that's always the perception of those outside of libraries.*

Continuously reinventing the library was regarded as necessary in order to correct imbalances in services and releasing resources that could be used in more significant areas of growth (P10, P11). Furthermore, some of the University Librarians remarked that they were trying to ensure that the library is seen to be participating in producing impactful outcomes for the university, or adding value to the university (P1, P7, and P10):

> *…we can be seen to be reactive rather than being proactive and strategically aligned to the institution. That's why we're putting so much effort into looking at how we can collaborate with others across the university to deliver really impactful outcomes, again, that are really tightly aligned to the institutional objectives, whether they be related to research, curriculum transformation and so forth; being a digital university of technology and enhanced learning.* (P10)

5.4.1 The Process of Continuously Reinventing the Library

The process of continuously reinventing the library consists of the following phases: the problem of knowing the limits (Property A); the library then responds with the strategy of transforming its organisational structure, services, workflows and technical systems (Property B); the library uses learning infrastructure as the mechanism for achieving system transformation (Property C); the learning infrastructure along with an agile culture (Property D) helps to achieve the goal of evidence-based decisions (Property E). The theoretical coding that explains these processes derives from Glaser's (1978, p. 76) *strategy* family (Properties B and C), Glaser's (1978, p. 77) *cultural* family (Property D), and Glaser's (1978, p. 77) *means-goal* family (Property E). This process is illustrated below in Figure 5.2, as a sequential order, with the arrows signifying the linear processual action taking place (Glaser, 1978; Saldaña, 2013, p. 251).

The relationship between these codes falls within Glaser's process theoretical coding family (Glaser, 1978, p. 74). However, Properties B, C and D represent taxonomy, where Properties C and D are a subcategory of Property B (Saldaña, 2013, p. 251). According to Glaser's theoretical coding, this relationship is one where Properties C and D are *dimensions,* or sections of Property B (Glaser, 1978, p. 75). To summarise this process, evidence-based decisions about library reinvention (Property E) are necessary because the library must know its limits (Property A). The limits can only be ascertained through the evaluation of evidence.

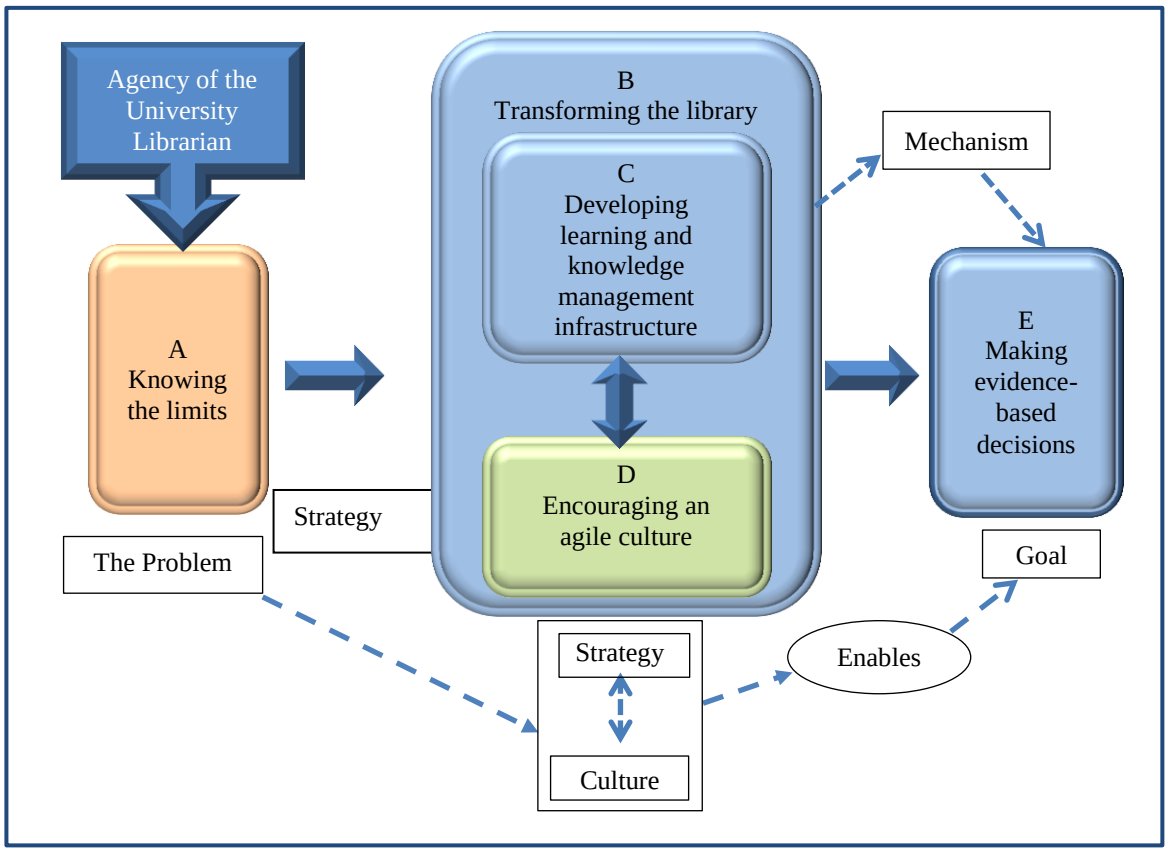

Figure 5.2. The process of continuously reinventing the library.

5.4.2 The Problem: Property 2A: Knowing the Limits

In order to reinvent the core notion of the library, the data revealed that the research participants were aware that they need to know their limitations. Eleven participants identified their limitations as a significant challenge in reinventing their libraries (P1, P2, P3, P4, P5, P6, P7, P9, P10, and P11). As P4 pointed out, knowing the limitation of the library was important because:

> *...we can't promise them the world if we can't deliver it and we've got to make sure that what we promise them we can actually bring to fruition.*

Participants identified the following limitations upon the implementation of new strategies and innovations:

- Achieving balance in services
- Across university budget reductions
- Increasing external cost pressures
- Workforce shortfalls
- Accounting for stakeholder needs

- The fears of library staff

Achieving Balance in Services

Some of the participants stressed the importance of achieving the correct balance with services (P7, P8, P10 and P11), as P7 states "*you've got to get the balance to make sure things are relevant*" (P7). Achieving balance in service offerings is difficult because of the many limitations described below.

Across University Budget Reductions

Most of the participants discussed the presence of budget constraints (P3, P4, P5, P6, P7, P9, P10, and P12). While P2 did not mention any current or past budget cuts, future budget cuts in relation to the possible deregulation of the higher education industry were looming. P12 alluded to the ever-present possibility of budget cuts in stating that the library was under the university's radar partly because "*we weren't costing them [the university] very much money*". P5 and P7 recounted the difficult budget cuts forced upon the library:

> *We took out, in the first five years that I was here; we reduced our library staff by thirty. Late last year we reduced it by another 27. That's massive cuts to staff.* (P5)

> *And we found through our restructure, that the library took a cut just like everyone else; quite a substantial cut.* (P7, interview two)

Budget cuts have led to difficulties in funding core business (P3, P6, and P9), as P6 remarked:

> *So, being expected to do all of these things and still being expected to provide and manage collections means is very tight.*

Budget cuts also made it difficult for libraries to fund innovation and the proliferation of new services that were required (P3, P5, and P6), as P3 pointed out:

> *So finding money for that type of innovation in a really tight budget, when you're still trying to manage your core process is always, always, a real challenge.*

Increasing External Cost Pressures

The participants stressed that cost pressures also came from external sources. These pressures included the fluctuating dollar (P3, P4, and P6), which, at the time of the interviews was a pressing problem:

We pay ninety percent of our information resources in US dollars and as you've seen the Australian dollar has plummeted and so we're under very, very significant pressure. (P6)

Other external pressures included increasing publishers' costs (P3, P6), changes in the publishing industry (P7), and the cost of refurbishing aging building infrastructure (P6).

Therefore, the University Librarians were sometimes forced to limit the introduction of technological innovations or new services. With these limitations, P11 acknowledged the need for the library to find its own budgeting solutions:

> *Given the reality of funding of higher ed [sic], we're not going get additional funding from the university to create new positions. We need to find savings within our funding envelope to do that ourselves.*

Workforce Shortfalls

Some of the participants focused upon the problem of workforce availability. P6 and P7 warned that if the workforce cannot perform or does not have the skills, then the planning will not work:

> *You can push as hard as you like to show how relevant you are, but if that's not being demonstrated by your workforce, then it's not going to go anywhere.* (P7, interview 2)

P2 complained that ATN-1 library struggled to attract and retain senior management who are willing to take on heavy workloads, and also that there are staff shortages in jobs such as data management, information management and technical skills. P3 had similar complaints that related to URU-1's regional location:

> *Attracting and retaining qualified staff especially staff of mid to senior levels. As a regional university it's always tough. Given that the profession is still dominated by females, you know it's really hard to get women to move their families and their partners up into an area.*

Accounting for Stakeholder Needs

Knowing the library's limitations also includes knowing the limitations of the stakeholder needs. Many of the research participants commented upon stakeholder needs frequently (P4, P7, P8, P9, and P10). Indeed, P4 and P7 were wary of the

introduction of technology or services simply because it had been successful elsewhere, as P7 stated:

> *So it's not a case of seeing the next best thing that's coming but it's actually looking at that and saying, alright, "what opportunities does that present".*

The Fears of Library Staff

A number of participants recognised the fear caused by changes in the environment of the university or library itself (P4, P12). Such fear can lead to lowered staff morale, which then impinges upon the library's services.

5.4.3 Strategy: Property 2B: Transforming the Library

In response to the problem of limitations, the library can resolve many of these by transforming the library's various systems including its organisational structure, workflows, communications, service offerings and technology. All twelve participants contributed data about how they transformed their library's various systems. The University Librarians in this sample considered that they achieved transformation by using the following strategies:

- Adopting systems thinking
- Deciding to change organisational and technical systems
- Conducting systems reviews
- Effecting incremental change
- Achieving transformational change

Adopting Systems Thinking

Three University Librarians discussed adopting a systemic approach to reinventing the library (P1, P8 and P12). P1 focused upon a systemic approach to systems thinking, where each part of the system operates as part of the whole:

> *So, since 2008 I have implemented in my workplace a systems design initiative which from the outset, requires that co-participants or colleagues identify the purpose of the system or systems within the larger organisational context.* (P1, interview two)

Systems' thinking was important to P1 because:

…if you approach the question of relevance on a one project at a time, or a one question at a time basis, that [sic] there is little if any impact. (P1, interview two)

A systemic approach involves looking at both human and technical systems (P1). P1 suggested using systems design tools with a learning focus, such as Peter Checkland's soft systems design tools. P12 used design thinking workshops for staff in preparation for the library restructure. P8 also talked about systems thinking for problem solving and used design thinking:

> *We're actively involved in understanding design and design thinking and we've got some design challenges ahead. On the projects, we deliver those projects through active involvement in the design phases - not just conceptual design but detail.*

The library must also prepare for the future. P7 was keenly aware of this; and reiterated the importance of looking towards the future in interview two.

Deciding to Change Organisational and Technical Systems

In order to transform its organisational and technical systems, the library begins by deciding to change. Nine participants spoke about why they change their systems (P1, P3, P5, P6, P7, P8, P9, P11, and P12). Sometimes the decision was a reaction to outside factors, as discussed above in section 5.4.2. For example, P5, P7 and P9 were forced to make changes, and P9 revealed "*That's because those budget cuts really forced us to look at our operations"* (P9). Sometimes change was instigated by the library itself, rather than because of a university directive (P1, P11, and P12), as P12 pointed out:

> *Up to this point there was no university impetus on us to change. The university hadn't said "You're not doing a great job, or you're due for change. From the university's perspective, we were doing a good job. We weren't costing them very much money. We didn't offend anybody. We got good satisfaction ratings so we weren't on anyone's radar.*

However, some changes were a response to structural problems. For example, P11 began to realise there were structural issues after two years of incumbency. For P11, these issues included a confusing structuring of the liaison librarians into two teams: one for research support, and one for student support. Secondly, there appeared to be too many service desks. Thirdly, there was wastage of money in areas that were experiencing shrinking demand, such as print resources.

More importantly, most of the research participants recognised that change was necessary because of the constant need to look to the future. The future was seen as largely involving technological innovation and the need to adjust to projected growth areas for the university such as digitisation or research support, as specified above in section 5.3.4. P11 prioritised the need for an Advancement Manager to help the library to engage with potential donors. For the majority of the University Librarians, regardless of their institutional type or location, the priority for the library was the development and introduction of new technologies (P1, P3, P5, P6, P7, P8, P10, and P12), as P3 stated, "*finding money for innovation is always - it's something that we have to do"* (P3).

Conducting Systems Reviews

System reviews were regarded as an important way for the participants to reassess their operations (P1, P2, P3, P4, P6, P8, P10, P11, and P12). For P4 reassessing or redesigning the "*back end"* systems required a systematic approach. This was also reflected by P10's assessment of how the library improved efficiencies in analysing, verifying and reporting research data for the university's research office. According to P10, IRU-3 library now had a systematic year round approach to gaining this data, rather than working on it for "*chunks"* of the year (P4, P10).

The participants reported that system reviews were done in a number of ways. Firstly, the university conducted internal reviews. These were undertaken in review cycles and were taken seriously by the library (P2, P4, P6, and P11). P11 elaborated upon this:

> *So all the academic departments and some of the divisions are supposed to go through a review every five years, where you bring in outside experts in the domain in a formal process.*

During P12's review, the external panel was invited by the library itself rather than the university, to conduct a review of its systems.

P2 stated that ATN-1 library had a sophisticated and formal review cycle, with reviews of almost every part of the library. The review involved the library staff, relevant stakeholders and perhaps external consultants. The review allowed the library to ask questions about those particular parts of the library:

> *Is the service relevant still, what should we be changing, what can we make more efficient, effective, and, you know, that then feeds back into everything from a range of outcomes from each review that then usually takes, obviously a number of months/years to do, to enable us to change staff, services and spaces to maintain that relevancy.* (P2)

Some of the participants did not mention formal university reviews, but stressed the need for the library itself to review its operations. P3, mentioned reviews in passing, while P4 alluded to reviewing and streamlining of systems such as the library management system and the information literacy classes:

> *We've been doing a lot of reviewing of processes and trying to streamline and take out a lot of what might be busy work or manual handling of things to use our systems better. We're in the process of reviewing a number of our actual systems, like our library management system, that sort of thing. So that we can look at how we can better streamline things and manage them from the back end.*

Participants indicated that the library then looked at the recommendations of the review and acted to work on them to achieve the recommended outcomes (P2, P3, P4, and P11). Indeed, P11 mentioned that certain recommendations made by the review panel were then addressed in the restructure of Go8-3 library. For P12, the external panel report was the impetus for the restructure undertaken at RUN-2 library:

> *They spoke to a lot of people across the university and they wrote a report for us. That report recommended large scale change. That report really was the impetus to say "you can't tinker with this. You've got to actually restructure and your structure is unworkable and really needs to change". That was great for us because it gave us an external validation that we needed big change.*

An alternative to the formal or informal review was reflection (P1, P10). P1 talked of the process of reflection which began with the visit of an academic who encouraged the library to assess the current systems of communicating and learning and to imagine ideal systems. P1 focused specifically upon the learning process within the library and reconsidering organisational structures. P10 referred to a "*year of learning*", and said "*this year really is about experimentation, innovation, and deep reflection…"*

The changes required for the reinvention of the library can be incremental or they can be transformational, involving restructuring of the whole organisation.

Effecting Incremental Change

Incremental change involves the iterative process of making constant improvements to a process (P1, P2, P3, P4, P5, P6, P7, P8, and P10). P1 had largely opted for incremental change:

> *We have incrementally changed our vision of our organisational roles on campus and in fact our place within the higher educational institutions that we serve.* (P1, interview two)

P10 talked of constantly recalibrating services:

> *The challenge is "how do I continue to recalibrate so that I have the right balance". It's not necessarily equal; it will continually shift in terms of what I can do.*

P3 discussed the constant search for innovation on several occasions, while P1 revealed that the shared leadership were continually evaluating professional practices and systems. This constant activity of improving services was also mentioned by P4. For some University Librarians, solving the problem of transforming systems was an intuitive or sensing activity (P3, P4).

Some incremental changes made by university libraries have been responses to immediate problems. For example, P6 stated that a big challenge was users eschewing the library's electronic resources in preference for the convenience of Google™. According to P6 the reasons for this included 'clunky' platforms and the lack of integration between platforms, restrictive e-textbook models, hard logins, and lack of advanced discovery services.

The solutions to these challenges are examined in greater detail in Property 3D: Engaging internally within the university (section 5.5.5). However, one example of an incremental solution was P7's resolve to overcome the resistance of academic staff to the introduction of e-books. This involved choosing the most user-friendly and common e-book platforms. The library then used promotional videos, conducted e-book online tutorials for students and faculty, and then finally, provided one-on-one support to individual academics that had particular problems in using e-books.

Where academics strongly refused to use e-books, a print copy would be purchased, but the e-books satisfied student demand (P7, interview one).

According to P8, one way of providing user access to the latest technologies was to provide spaces for creative technologies such as games, but also providing the games themselves. Library technologies were perceived by participants to be another important way of ensuring the relevance of the library (P1, P2, P5, P6, P7, P8, and P10). P10 mentioned the innovation of mobile technologies for research support. P8 emphasised this:

> *…it's a constant requirement that we stay on top of library technologies and general changes to the media landscape and we provide access to those creative technologies. Some examples are things like games which are now part of the popular culture and therefore part of the literature libraries need to provide.*

However, P7 warned that the technology itself must be relevant to the stakeholders, and engagement with stakeholders is important in ensuring this relevance. According to P8, another way of optimising the stakeholder usage of the library space itself was to provide a library space that provides the institutional identity, culture and mediated services of the university.

Achieving Transformational Change

As opposed to incremental change, transformational change requires an organisational restructure. Restructuring means pulling apart the library's structure and services and then rebuilding them. Six university librarians referred to restructures they have undertaken (P4, P5, P7, P10, P11, and P12).

For P11 of Go8-3, the library restructures entailed changes to a confusing liaison librarian system where two separate teams were serving the academic staff and the students; changing multiple types of service desks to a single point of service; and diverting resources into growth areas such as data management, scholarly communication and digitisation. P11's restructure involved a lengthy process which was prescribed by the university according to an enterprise bargaining agreement with the unions. This involved the following processes:

1. Writing an initial issues paper justifying the need for the change.
2. Consulting with staff.

3. Writing a formal proposal describing the detail of the change, including the positions to be made redundant and the new types of positions.
4. More consultation with staff.
5. The final proposal

For P11, the benefit of such a transformational change was that there was a prescribed process, making it easier to enact the change. As P11 stated, "*It's actually helpful that it's prescribed because you at least have a blueprint to follow"*. P11 was also able to follow and copy the process of an earlier restructure within the university:

> *There was a significant bigger change that followed that same EB [enterprise bargaining] mandated change management process that we were able to use as something of a model. That was certainly helpful to me to kind of understand how to get these things done in the university-approved way.*

However, the Go8 University Librarians stated that the drawback of the prescribed university process was its time length, causing difficulty for those whose jobs are being disestablished. Another drawback was that for Go8 libraries in particular, restructuring had sometimes caused negative media attention (P5, P11). For this reason, P11 chose to make his restructuring more conservative. Another drawback of the major restructure was the emotional fallout of redundancies (P5, P11). As P5 revealed:

> *There's been a lot of heartache around some of that with some of the restructuring and redundancies and things like that.*

P7 of IRU-2 focused upon the importance of position descriptions that would attract the kinds of skills and attitudes that would take the library into the future, remarking "*they were quite high level, and that certainly threw some people when they looked at them*" (P7, interview 2).

The approach of the RUN libraries in restructuring was markedly different from that of the Go8 libraries. P12 coached current staff into the restructure. This was done by:

1. Workshopping with staff to ensure they were felt included in the decision-making process

2. Workshopping with staff to allay their fears about change.
3. Dividing staff members into teams to produce reports about nine areas of current university library practice.
4. Allowing staff members to analyse their own roles which were then assessed by the management team.

These steps enabled current staff members to understand how their own jobs may change. This approach empowered them to understand how they might re-skill for the future. P4 also appears to have taken a similar approach, requiring staff to undertake extra training, stating "*we've done some restructures and joined teams, and done multiskilling and a whole lot of things like that"* (P4).

5.4.4 Mechanisms: Property 2C: Developing Learning and Knowledge Management Infrastructure

In order to engage library staff in the process of reinventing the library, the data reveals that many of the University Librarians have established an organisational infrastructure that entails learning and knowledge management practices. This in vivo phrase was derived from the interviews with P1, but it was clear that the majority of University Librarians had established infrastructure for decision making that entailed learning and knowledge management practices (P1, P2, P4, P6, P7, P8, P9, P10, and P12). According to P1 learning infrastructure provided the organisational systems and professional practices that enable learning. These conditions permitted participants to get a better understanding of new situations (P1, interview one). P9 also displayed understanding of this process by stating that the library then needs to learn how to meet the needs created by the new situations (P9).

P1 talked at length about developing learning and knowledge management infrastructure that provides the evidence for decision making:

> *We have to learn how to sustain our decision making and we rely on evidence to do that, but it requires a learning infrastructure within the organisation.* (P1, interview 1)

The data shows that the participants used the following mechanisms to achieve an organisational learning and knowledge management infrastructure:

- The leader learning from other leaders

- Collaborative leadership structure
- Team infrastructure for learning and knowledge management at all levels

Learning from Other Leaders

The first mechanism for achieving a learning and knowledge management infrastructure is that learning and knowledge management is practiced by leadership and modelled to lower levels of the organisation. Many participants referred to how they learn from other leaders (P1, P2, P3, P4, P5, P6, and P7). P1 noted the important influence of various academic thought leaders. Indeed, P1 stressed the importance of the learning experience:

> *And from [the LIS academic's] framework, I could see that what we were actually designing was an information experience - a series of information experiences. She would say: "What kind of experience will progress a particular outcome, a particular learning outcome"? So that's actually what we were doing although we didn't use that language. So I learned.*

P2 and P4 mentioned how they had been able to observe and learn from other leaders and researchers in the LIS community. P2 learned from observing others, while P4 valued the opportunity to learn through collaborative meetings with other librarians. The influence of other librarians was seen as extremely important. Many librarians referred to the importance of working collaboratively through CAUL in an effort to share the load of the challenges they faced (P2, P3, P4, P5, P6, P7 and P10).

Developing Collaborative Leadership

The second mechanism is that of collaborative leadership, where leaders learn from each other (P1, P2, P7, P8, P9, P11 and P12). A number of the librarians acknowledged the importance of acting as a team. P1 specifically used the term "s*hared leadership team"* to talk about a wider team which included herself and her associate directors and also various staff from the library units. P1 began her shared leadership group with an intention and purpose:

> *I transformed that governance group to the "Shared leadership team" which originally included about one third of all employees, as a means of modelling collaborative decision making* (P1, interview one)

P1 was unique in having a guiding philosophy that has guided her in developing a sophisticated learning and knowledge management infrastructure:

> *So I was very interested in the concept of leadership but I didn't really have a personal philosophy. So when I worked at a previous institution I had the good fortune to be exposed to the organisational philosophy of John Dewey and that encouraged me to think about the value of actually doing and learning from that. And then, as in a classroom, all members of an organisation actually doing together and learning from that. So that's actually how my philosophy of shared leadership began and how, in a similar fashion, collaborative evidence-based information practice began - because it's like classroom activity. So I really approach the whole notion of organisational leadership through the lens of education.* (P1, interview one)

P7 and P12 did not specifically mention the team, but used the term "*we*" when talking about the library. During interview two, P7 talked of the management team and about the importance of joint decision making. P11 referred to the library executive group, a more centralised group consisting of P11 and the directors of four divisions. P2 alluded to the "*library leadership team"*, which appeared to have a similar structure to the shared leadership team established by P1:

> *We then have the group of thirteen which is the library leadership team and that does include the branch managers which are obviously very significant folk.*

P9 commented on the "*incredible team"* in the library. P8 emphasised team work on at least two occasions and talked about the library as "*we"*. In fact, the importance of the team was underlined by P8's response to the main question (Q1) of the interview, which began thus:

> *Well, it's a team effort. It's not just me, and that's important for a relatively big library at a relatively big, sort of medium size university.*

P8 stressed this again "*It's important to know it's not just me as the university librarian*".

The functions of the leadership team were described by participants as building and approving the budget (P1), deploying human resources (P1, P2), strategic planning (P1), and scanning the external environment (P1, P7). P2 emphasised the importance of the library's human resources manager. P9 talked effusively about the role of the library management team in managing workflow in the wake of major budget cuts:

> *They have looked at how we conduct our processes. They've done a lot of workflow management. We have been able to install software that helps us with workflow management.*

More importantly, the role of the leadership team was seen as identifying new opportunities or roles for the library (P1, P2, and P7), as P1 and P2 pointed out:

> *So in my current organisation we have a shared leadership team that has oversight for the prioritisation of directions.* (P1, interview one)

> *In terms of how we make decisions about where the money goes … there is the very senior group of the library staff, and so, myself as Director, the two Associate Directors and the Workforce and Infrastructure Manager really do make the final decisions on strategic priorities.* (P2)

To that end, P8 also stressed the role of the leadership team in staying engaged with the university:

> *I've got three directors now. They stay involved in all manner of committee meetings, representing me, and committee meetings and board meetings and project control groups.*

Team Infrastructure for Learning and Knowledge Management at all Organisational Levels

The third mechanism is provided for the staff of the entire organisation. This involves the creation of team structures, which includes committees and taskforces; the provision of professional development for all staff; and underpinning these practices by retaining and sharing knowledge. Teams were mentioned by a number of librarians. P2 discussed the library as part of a wider divisional team. The library as a whole was mentioned as a team (P8). P4 discussed the necessity of joining teams together as part of restructures. Other participants referred to the individual teams that operate in the library: the shared leadership team (P1), library leadership team (P2), the library executive group (P11), the management team (P7), and the academic outreach team (P10), the Liaison Services team (P10), the research support team (P2), the web team (P8), and the "*change team*" (P7, interview 2).

P8 was particularly critical of some current trends in library management where functional units are separated. P8 stressed the importance of library units working together:

> *Libraries are meant to work together and they're much more effective in what they do when they work together.*

Teams work together (P1, P8), but according to P2 they also champion, or advocate for each other. Teams function to discuss new priorities and ideas. P1 asserted that at USSU-1 library, team meetings were known as unit forums where knowledge and new insights specific to that unit were shared:

> *The directors of those units regularly convene members of those units, and they, through conversation, dialogue and reflection, surface priorities for their units.* (P1, interview one)

Teams are also often created to perform certain tasks. In USSU-1 library, P1 reported that decisions were made with the creation of committees and taskforces to advise the shared leadership group. The committees included the Information Technology Oversight Committee (ITOC), which determined the technologies; and the User Experience Committee, which examined the learning experiences of stakeholders and then advised the ITOC (P1, interview 2). Those committees included staff from all levels of the library who were engaged with the subject area. These committees were also subject to revision.

P7 used a Change Team as an advisory team for the restructure of the library. P6 also referred to a committee or taskforce structure:

> *We've got groups of staff at the moment tasked with looking at the core priority areas of the university and how the library supports those.*

P12 also began looking at change using a group of professional staff who brainstormed change strategy. Also, all members of staff were included in creating action plans and doing research:

> *So we divided our entire staff from the lowest staff member to the highest staff member into nine groups. Each of those groups had a group leader and … they had from July to the end of October to come up with an action plan and do some research.* (P12)

P1 pointed out that USSU-1 library had a sophisticated set of meeting structures so that all staff members were included in the decision-making cycle. P1 emphasised the importance of recording minutes, sharing those minutes publicly, and keeping all interested persons up to date on the decision-making process, although

the actual decisions where resources and strategies are made were at the shared leadership level.

5.4.5 Culture: Property 2D: Encouraging an Agile Culture

Building an agile culture incorporates the two areas of building a team culture and also building a learning culture. Both attributes of this property are elaborated upon in sections 5.6.5 and 5.6.6 and therefore are not discussed here, although the data is included in Table 5.3 below. Nevertheless, both teams and learning are required in order to create an agile culture. Agile culture enables rapid change to take place and it facilitates the reinvention of the library that is based upon empirical evidence.

5.4.6 Goal: Property 2E: Making Evidence-Based Decisions

Many of the participants talked explicitly about using evidence for their decision making (P1, P3, P6, P7, P8, and P10). The data reveals that all participants in the initial sample, as well as participants P11 and P12, used evidence-based decision-making processes. Evidence-based decision making is important because of the increasing complexity in decision making (P1). The evidence required for decision making is either quantitative or qualitative. Evidence is gained directly through engagement with stakeholders, which is discussed in more detail in Category 3: Engaging with Stakeholders (section 5.5). The goal of evidence-based decision making is achieved through the following process:

- Formulating a question
- Gathering data that provides an answer
- Evaluating the evidence
- Taking action
- Allowing time for action to take place
- Reviewing the project

Formulating a Question

Evidence-based decision making begins with the explicit formulation of a question (P1). For P12, who began her restructuring project only knowing the library required change, the question was simply "*What should we do*?" (P12). P12's

research question was more focused when it came to focus group research with academics and students: "*In 2022, what should the library look like?*" (P12). The research questions that the participants revealed were:

1. What do our stakeholders need/require/desire? (P3, P4, P5, P7, P9, and P10). For example:

   Like I said at the beginning, you really have to find out what your stakeholders require and desire. (P3)

   … get a better understanding of what their particular needs or expectations may be at that point of time. (P10)

2. How do we ensure our services are meeting the needs of stakeholders as they change? (P2, P4, P7, and P9). For example, P7 stated:

   We want to meet the new and emerging needs of stakeholders. (P7, interview one)

   P9 wanted to know:

   …whether or not we're meeting the needs that the students and the faculty have identified.

3. How do we ensure our services are going to meet any projected future needs? (P7)

4. P10 asked a number of questions:

   "…are these the right things we should be doing?", "what is the potential impact or value to the institution by adopting new approaches to the way that we might design or deliver some of our services?", and "what does that mean in terms of our internal – what does that mean in terms of organisational design?" So "how do we reshape or recast the organisation?"

Gathering Data that Provides an Answer

In order to answer the question or to solve the problem the many of the participants remarked that they need to find evidence that guides their decision making. There are a number of ways of gathering evidence. Decisions that involve stakeholders require feedback from the stakeholders (P2, P3, P5, and P7). P10 also called this: "*listening to stakeholders*". Feedback is gained by gathering evidence in

the form of both qualitative and quantitative data. The participants remarked that qualitative data can include softer observational data (P1), focus groups (P3 and P12) and direct feedback from interaction at desks (P4) or direct suggestions/complaints (P2), or using students as staff (P5, P8). The harder quantitative data was also used by the participants, and this included the data gained from surveys (P2, P3 and P7), statistics (P3), and usability tests (P1), *Uniforum* Benchmarking (P2), and university business analytics tools (P3). Another way to gain quantitative data was to monitor inquiries (P10).

The University Librarians engaged in restructuring gathered data by consulting with a range of stakeholders. P7 emphasised the importance of consulting within and outside the library. However, the need for confidentiality limited the amount of information that could be released, and therefore, consulting was done within those limits. P11 of Go8-3 consulted with an external library advisory committee. Indeed, consulting widely with a range of stakeholders was mentioned frequently by P12. Therefore, evidence-based decision making can only be done if the library is engaging with its stakeholders. Engagement with stakeholders is discussed in detail in section 5.5.

The University Librarians participating in this study also gained evidence by scanning the internal (university) environment and the external environment (P1, P2, P4, P8, P10 and P12). P2 called this "*looking outward*". P10 called this "*a deep analysis of the current environment*". P4 and P8 called this "*awareness*".

According to the research participants, scanning the internal (university) environment involved activities such as applying for grants within the university (P3), being involved in the accreditation process (P4), or attending the Vice-Chancellor's retreat (P5). Participants revealed that another valuable way of gaining awareness of university activity was to sit on committees and to encourage staff members to volunteer for university committees (P1, P2, P4, P6, and P7). Such committees included Learning and Teaching Committees or the Research and Graduate Studies Committee (P4, P6, and P7). P3 also described the value of chairing various university-wide projects. Scanning activity also occurred in the simple activity of talking with people (P3, P4, P5, and P7). For various participants, talking with people happened in the everyday activity of the library front desk (P4), having lunch or spending some social time with heads of departments (P3), talking

with staff groups (P5), and in the day-to-day activity of liaison librarians who talk with faculty members (P3, P5, P7, P8).

Scanning the external environment for best practice consists of activities such as scanning government policies and requirements in order to redirect the library's energies (P10). P10 specifically referred to research requirements:

> *So again we are better equipped to deal with the research outputs, various artefacts; what was emerging in terms of mandates arising from the ARC, the HMRC in terms of identifying the grant numbers and so forth. So there were a lot of external signals saying that we need to redirect our effort, our energy and our capability to augment the research endeavour.*

P1 and P2 emphasised the benefits of collaborating with LIS researchers and collaboration with other libraries. P5 researched the work of similarly ranked English universities. P8 also conducted similar activity:

> *We do a bit of research ourselves into what's happening with those challenges and who's doing what and what's working.*

During P12's restructure, staff members were divided into teams to produce research about practice in other universities, which involved:

> *Either investigating peoples' websites; reading journal articles; visiting universities; interviewing people at other universities; doing little surveys and those types of things – to tell us what the opportunities for this university were in these nine different areas that we had decided on.*

P7 collected organisational charts from other libraries in the process of restructuring her library. P7 also researched other non-library service organisations, such as the Apple Store, for their practices and structure.

Visiting other libraries and encouraging staff to visit other libraries was also regarded as important (P2). P8 was unapologetic that the library takes other peoples' ideas. The University Librarians revealed that another important scanning device was involvement with peak bodies such as CAUL, the Australian Library and Information Association (ALIA) or the Tertiary Education Quality Standards Agency (TEQSA) (P2, P3, P4, P5, P6, P7, and P10). Finally, reading about professional, technology-related areas and higher education was regarded by the participants as simple, but important (P3, P7, and P8).

Evaluating the Evidence

Following the evidence-gathering stage, the University Librarians indicated that they carefully evaluate the evidence. This means interpreting evidence or feedback analytically, and critically analysing the kinds of data available through discussion of not only the questions, but "*the consideration of what is authoritative knowledge*" (P1, interview 2). P8 was particularly critical of surveys, and the participants were aware of the need to consider how the data is used (P1, P2, P7, P8, P10, and P12). For example, P12 was aware that survey questions used to gain feedback for the library restructure at RUN-2 were possibly worded incorrectly.

Some participants mentioned the need to evaluate evidence in order to guide the library's strategic priorities (P2 and P10), introduce new services/products, or streamline current processes (P9), as stated by P7:

> *So if you find that there are new things happening and it looks like the benefits are great, we would look at how we might introduce those.* (P7, interview one)

During the restructuring process, P12's management team re-assessed position descriptions, as written by staff members:

> *Kind of finding the unusual things so that we could know when we're designing a new structure how much we have to change, or whether we have to do a lot of professional development with people or, you know, what things that we are doing that are really inefficient.*

Taking Action

University Librarians then take the feedback or evidence and act upon it, react to it, or address it (P1, P2, P7, P8, and P10), as P2 stated:

> *I think that's the other thing is that the relevance factor is that you've taken on board what people say and you do your best to action it.*

For the participants, taking action took different forms at different times (P1, P6, and P8). Where the library has restructured, action involved written proposals which included the new job descriptions (P11, P12). Libraries also took action by taking on building projects which included the repurposing of physical spaces (P1, P2, P5, P6, and P8).

Participants pointed out that they took action by adding university services into the centralised location of the library. This centralised the activity that was otherwise duplicated throughout the university. For example, centralising publication management improved the process for reporting publication data (P10). P7 also reported the placement of student services in the library, which provided improved customer service for students.

The participants pointed out that another important action was the library's involvement in university-wide strategies. P5 called this action "*deliberately inserting*" librarians into university activities. This created greater challenges and consequences for libraries.

One of these challenges/consequences is that libraries are now adding non-traditional (but related) services to their stakeholders. This point was stressed by a number of librarians:

> *…the library has a range of sections that have morphed and/or been added over time that means that the library is not a traditional library.* (P2)
>
> *…we need to diversify our offerings to make sure that our engagement and relevance is assured.* (P5)
>
> *We need to stop doing things and start doing different things.* (P6)
>
> *Now that's not a traditional library role, but it capitalised on the skills we have and the expertise we have and it really meant we were doing something that was relevant to the university.* (P7, interview one)

The newer non-traditional roles libraries were adding included being involved in the university engagement strategy (P5), providing help with career advice for students (P8), delivering the university's inquiry management service (P2), taking responsibility for the university's information management policies, requirements and processes (P2), working with the human resources department (HR) on recruitment of talented academics by researching bibliographic outputs (P5), providing internship opportunities for students (P8), and providing project management for the university in the testing of electronic research notebooks (P2).These initiatives also benefited the library by providing the library staff with access to the expertise of non-traditional library staff (P2).

Allowing Time for Action to take Place

Some of the participants stated that it takes time for processes to occur and to allow for ongoing work to continue (P1, P2, P11, and P12), as P11 commented:

> *It took from September to the end of December to get that [the restructure] all finalised and approved. So that the official approval process – we had it in place by the end of last year. Some changes were implemented beginning of this year. The bulk of the changes were done at the beginning of April. As of April we were officially restructured.*

Reviewing the Project

The restructure P11 undertook also entailed a review of the project where the library then reports back to the various consultative committees on how well the restructure has gone.

5.4.7 Summary of Participants' Multiple Perspectives

As shown in Table 5.3 (below), all participants spoke about the properties that comprised this category. P7, P11, and P12 featured heavily in this category and its properties because they spoke in-depth about their library restructures during the theoretical sampling stage. However, all participants spoke about the reinvention of their libraries for a significant percentage of the interview, whether it involved constant reviewing or evaluation or the more substantial and disruptive restructure.

P6 and P9 showed the most concern about the limits placed upon the library (Property 2A: Knowing the limits). As discussed earlier in section 5.4.2, they had both discussed decreased budgets. In Property 2B: Transforming systems, P11 and P12 spoke the most about systems transformation. This is not surprising because they were recruited to talk about their restructuring process. Of all participants during the initial sampling stage, P1 made most comment on transforming systems. Indeed, the importance that P1 allotted to learning infrastructure (Property 2C: Developing learning infrastructure) is evident in the data. Finally, it is evident that all participants used evidence-based decision-making processes (Property 2D: Making evidence-based decisions). P2 discussed decision-making processes the most, while P7, P11 and P12 referred to these processes in discussing their library restructures.

Table 5.3

The Response of Participants: Category 2: Continuously Reinventing the Library

PROPERTIES	USSU	ATN	IRU	RUN	Go8
2A: Knowing the limits: Budget constraints	*University budget cuts (P9) *Holding back on new services (P9)		*University budget constraints (P3, P7, P10)	*University budget constraints (P4, P12)	*University budget constraints (P5, P6, P11) *Creating budgeting solutions (P11)
2A: External cost pressures			*Fluctuating dollar (P3) *Increasing publisher costs (P3) *Changes in publishing industry (P7)	*Fluctuating dollar (P4)	*Fluctuating dollar (P6) *Increasing publisher costs (P6) *Ageing infrastructure (P6)
2A: Workforce shortfalls Skills deficits			*Skills deficit leads to failure in execution of planning (P7)		*Skills deficit leads to failure in execution of planning (P6)
2A: Attracting and retaining staff		*Struggle to attract senior management (P2)	*Struggle to attract middle to senior management (P3)		
2A: Stakeholder requirements	*Stakeholder requirements (P9	*Stakeholder requirements (P8)	*Stakeholder requirements (P7, P10)	*Stakeholder requirements (P4)	*Keeping print resources(P6)
2A: Fears of library staff				Staff fears about change (P4,P12)	
2A: Achieving balance in services		*Balancing core & new services (P8)	*Balancing services (P8, P10)		*Balancing services (P11)
2B: Transforming the library: Reasons for change	*University budget cuts (P9 *Problems with services (P1) *Innovation / technology for future (P1)	*Innovation/ technology for future (P2, P8)	*University budget cuts (P7) *Innovation/ technology for future (P3, P7, P10)	*Structural problems (P12) *Innovation/ technology for future (P4, P12)	*University budget cuts (P5) *Structural / service problems (P11) *Innovation/ technology for future (P5, P6, P11)
2B: Adopting systems thinking	*Soft systems design (P1)	*Design thinking (P8)		*Design thinking (P12)	
2B: Systems reviews			*Systematic approach (P10)	*Systematic approach (P4)	
2B: Formal reviews		*Formal reviews (P2, P8)	*Formal reviews (P3,P10)	*Reviews (P4, P12)	*Formal reviews (P6, P11)
2B: Reflection	*Reflection (P1)		*Reflection (P10)		

PROPERTIES	USSU	ATN	IRU	RUN	Go8
2B: Effecting incremental change	*Focus on professional practices and systems (P1)	*Focus on technology (P2,P8)	*Focus on technology (P7,P10)		*Focus on technology (P5, P6)
2B: Constant improvement	*Continual evaluation of professional practices and systems(P1)	*Constantly monitoring technology (P2, P8)	*Constantly recalibrating services (P7, P10) *User preference (P7) *Intuitive (P3)	*Constant improvement – intuitive (P4)	*Constantly monitoring technology/ user preferences (P6)
2B: Achieving major change Transforming			*Restructures (P7, P10) *Changing employment criteria to attitudes of flexibility, service focus & potential (P7)	*Restructures – consultation with staff, empowering them to reskill for future needs (P4, P12)	*Restructure - follows university processes, engagement with trade unions (P5, P11)
2B: Restructuring and staff				*Restructure accounted for feelings of current staff (P4, P12)	*Restructure causes emotional fallout & draws negative media attention (P5, P11)
2B: Effects of restructures	*Restructures- using technology to replace worker shortfalls (P9)			*Allowing staff to retrain and add to skillset (P4)	*Redundancy of staff (P5, P11)
2C: Developing learning and knowledge management infrastructure	*Learning from academics (P1) *Collaborative team leadership (P1, P9)	*Learning from CAUL (P2) *Collaborative team leadership (P2, P8)	*Collaborating through CAUL (P3, P7, P10) *Collaborative team leadership (P7)	*Learning from CAUL & QULOC (P4) *Collaborative team leadership (P12)	* Collaborating through CAUL (P5, P6) *Library executive group (P11)
2C: Team structure at all levels	*Teams that perform everyday functions (P1)	*Teams that perform everyday functions (P8)	*Teams that perform everyday functions (P10)		
2C: Taskforces	*Taskforces, committees (P1)		*Change team (P7)	*Various restructuring groups (P12)	*Taskforces, committees (P6)
2C: KM practices	*Recording & sharing minutes (P1)				
2D: Encouraging an agile culture: Leader as model	*Leader learns from others (P1) *Leader is part of learning community (P1) *Learning is modelled to staff (P1)				

PROPERTIES	USSU	ATN	IRU	RUN	Go8
2D: Staff learning	*Learning is holistic (P1)	*Importance of professional development (P2)	*Importance of professional development (P10) *Looking for learning capability (P7)	*Importance of professional development (P4) *Benefits in multiskilling staff (P4)	*Importance of professional development (P6)
2D: Types of learning: Formal	*Learning infrastructure (P1) *International staff exchanges (P1) *Monthly learning café/tea (P1) *Unit forums (P1)	*Workshops (P8) *Conference attendance (P2) *Conducting research (P2, P8) *Systematic reviews of systems & services (P2)	*Writing papers for conferences (P3)	* Workshops (P12) *Attending professional development events (P4) *Systematic reviews of systems & services (P4)	*Conducting research (P5) *Systematic reviews of systems & services (P6, P11)
2D: Informal: Experiments	*Testing systems, products, services (P1) Library as lab (P1)	*Testing systems, products, services (P2)	*Testing systems, products, services (P7, P10)	*Testing systems, products, services (P4)	
2D: Allowing mistakes		*Mistakes as a learning experience (P8)			
2D: Collaboration on projects	*Collaborative learning (P1)	* Partnerships with faculties, researchers, interns, other libraries (P2,P8)	*Collaborative projects with faculty and researchers (P10)	*Allowing staff to collaborate on projects (P12)	
2D: Other forms of learning	*Problem solving (P1) *Learning by doing (P1)	*Learning through play (P8)			
2D: Reflection	*Reflecting (P1)	*Reflecting (P8)	*Reflecting (P3, P10)		
2E: Making evidence-based decisions	*Formulate a question (P1) *What do our stakeholders need? (P9) *Are we meeting their needs? (P9)	*Are we meeting their needs? (P2)	Are we doing the right things (P10) *What do our stakeholders need? (P3, P7, P10) *Are we meeting their needs? (P7)	What should we do? (P12) *What do our stakeholders require? (P4) *Are we meeting their needs? (P4)	*What do our stakeholders need? (P5)
2E: Gathering data that answers the question	*Gathering feedback (P1, P9)	*Gathering feedback (P2, P8)	*Gathering feedback (P3, P7, P10)	*Gathering feedback (P4, P12)	*Gathering feedback (P5, P11)
2E: Scanning the internal environment	*University committees (P1)	*University committees (P2)	*University committees (P3, P7) Liaising, talking (P3, P7)	*University committees (P4) Talking (P4)	*University committees (P6) Liaising, talking (P5)

PROPERTIES	USSU	ATN	IRU	RUN	Go8
2E: Scanning the external environment	*Collaboration and research with academics and other libraries (P1)	*Researching similar libraries (P2, P8) *Peak bodies (P2)	*Researching other libraries (P7 *Peak bodies (P3, P7, P10) *Scanning government policies (P10)	*Researching other libraries (P12) *Peak bodies (P4)	*Researching similar libraries (P5) *Peak bodies (P5, P6)
2E: Evaluating the evidence	*Critical analysis of evidence (P1)	*Critical analysis of evidence (P2, P8)	*Critical analysis of evidence (P7,P10)	*Critical analysis of evidence (P12)	
2E: Taking action		*Diversifying activity (P2, P8)	*Diversifying activity (P7)		*Diversifying activity (P5, P6) *Deliberately inserting librarians into university activities (P5)
2E: Allowing time and review	*Allowing time (P1)	*Allowing time (P2)			*Allowing time and reviewing (P11)

5.5 CATEGORY 3: ENGAGING WITH STAKEHOLDERS

The term *engagement* incorporates a number of concepts or phrases that the participants used, including "*liaison"*, "*promotion"*, "*promoting awareness"*, "*building relationships*", and "*collaborating*". Participants P1, P3, P5, P6, P7, P8 and P12 used the term "*engagement*", and engagement was regarded as a priority for the library. This term was probably used by these participants because, as P5 revealed, engagement was being investigated by CAUL at the time.

A number of University Librarians stressed the importance of engagement with stakeholders (P2, P3, P4, P5, P6, P7, and P8). P3 stated that engagement is important and that this was reflected in the titles given to Liaison Librarians. P3 also talked of the Special Collections Librarian as engaging with potential donors, special researchers and other researchers. In a similar way, P6 stated that the library can no longer be seen as a separate entity. P2 did not use the term "*engagement*", but rather used the word "*promotion*" or "*people know about your library*", or "*awareness*", and P4 used the term "*liaison*". P8 discussed the priority given to engagement in ATN-2 library:

> *I made engagement a major priority for us, and I'll discuss that against some of the other questions – what that actually means. That's an item on all of our management meeting agendas, and everybody knows it's a significant issue.*

Indeed, P5 cited improvements in ranking for English universities that had included engagement as a factor in their rankings. These rankings used case studies that monitor the university's impact on the wider community. P5 pointed out that Go8-1 library now falls under the jurisdiction of the Vice Principal for Engagement. For this reason, Go8-1 University was tapping into the expertise of P5 in engaging with stakeholders.

Engaging with stakeholders has a dual purpose. Firstly, it enables the library to find out the needs of stakeholders and how the library can best meet those needs. Secondly, it allows the library to promote itself, its brand, and its services, thereby maintaining its relevance (P2, P3, P4, P5, P6, P7, P8 and P10). P7 commented that "*by staying engaged you are able to promote what you do and you're able to get feedback from those people*" (P7, interview one). P5 alluded to "*the various ways of - promoting ourselves internally*". Similarly, P4 remarked that in order to maintain relevance, the library must "*ensure that our stakeholders understand our role in the academic environment and what we do*".

5.5.1 The Process of Engaging with Stakeholders

Figure 5.3 (below) illustrates that the process of engaging with stakeholders begins with the problem of coping with changing stakeholders and stakeholder requirements (Property A). The library responds with the strategies of knowing the stakeholders (Property B) and of encouraging an engaged culture (Property C). Following this the university library uses the techniques of engaging with the library's internal university stakeholders and its external stakeholders (Properties D and E). The theoretical codes of *strategy* and *mechanisms* belong to Glaser's (1978, p. 76) coding family of *strategy.* The theoretical code of *culture* belongs to Glaser's (1978, p. 77) *cultural* family of codes.

The figure shows the sequential process (Saldaña, 2013, p. 251), or temporal ordering (Glaser, 1978, p. 78) of engaging with stakeholders. Properties B and C, however, are mutually dependent, and this relationship belongs to Glaser's (1978, p. 76) *interactive* family of codes.

To summarise the process, the sequence below shows that the library engages with its internal and external stakeholders (Properties D and E) in order to cope with changing stakeholders and stakeholder needs (Property A).

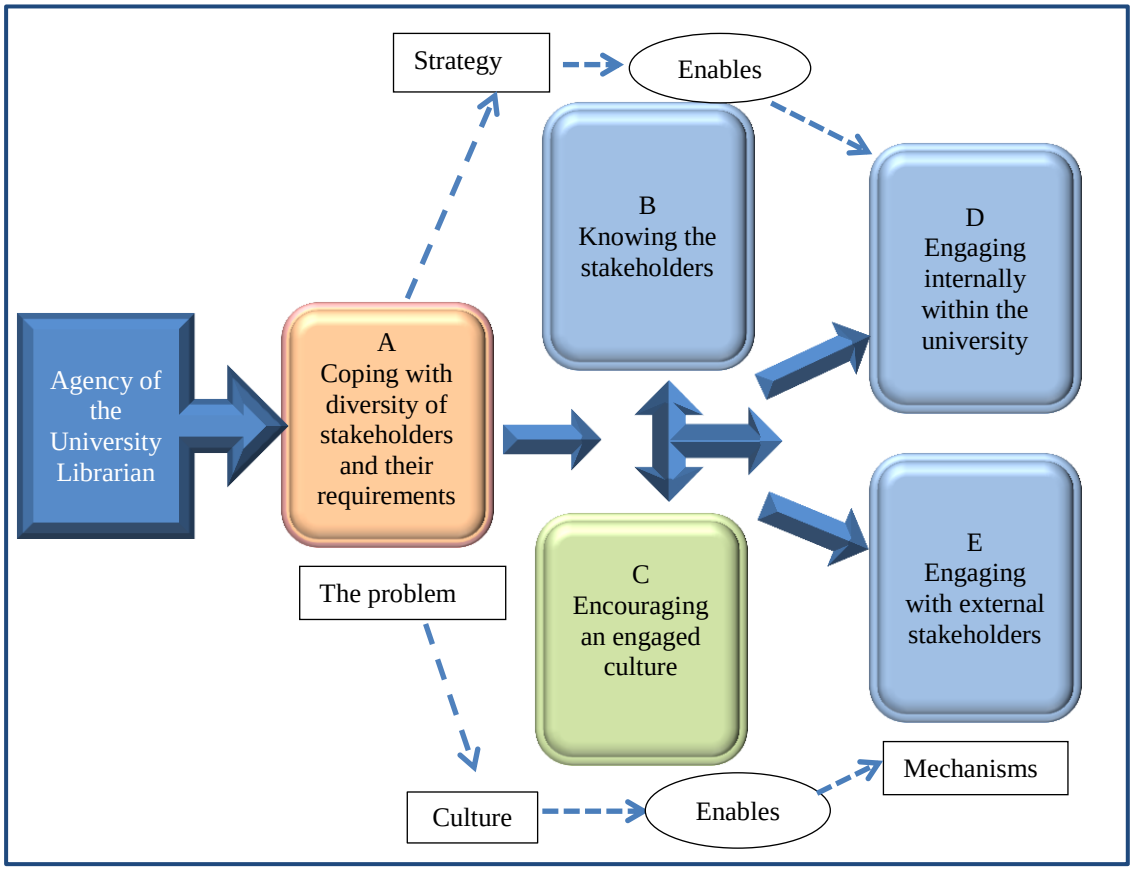

Figure 5.3. The process of engaging with stakeholders

5.5.2 The Problem: Property 3A: Coping with the Diversity of Stakeholders and their Requirements

P4 stated that the consequence of non-engagement with stakeholders is that:

> *If you sit back and wait for them to ask, often it won't happen. They'll sit back and grumble about what they're not getting, but you'll be none the wiser.*

The participants identified two factors that create the problem for university libraries:

- Stakeholder diversity
- Coping with diverse stakeholder requirements

The research participants identified a wide range of stakeholders including: the wider society or the general community; and the university community, which

included administrators, faculty, researchers, and non-academic staff and students. These are described in detail below in Property 3B: Knowing the stakeholders. The University Librarians perceived a diversity of stakeholders (P2, P6, and P7). Indeed, coping with the diversity of stakeholders was nominated as a challenge (P2, P4, P5, P6, P7, and P8). Therefore, participants acknowledged the need to cope with the diverse needs of students (P4, P5, and P7). The participants from some of the regional universities claimed the biggest challenges because they had more diverse student populations (P4, P7). These universities tended to the needs of many first-year students who were at risk of dropping out due to being first in family, low SES or low ranking tertiary admission (ATAR) students.

The Go8 libraries of P5 and P6, struggled with the problem of the entrenched attitude of academic staff towards changes in the library. P6 expressed frustration about the expectation to maintain print collections, while also building electronic collections. P5 and P11 conveyed an awareness of the problem of academic staff making public protests at some universities.

For the newer growing university RUN-1, this was not a problem, but P4 mentioned the struggles other university librarians have with this expectation. P10 alone mentioned only researchers as a stakeholder.

5.5.3 Strategy: Property 3B: Knowing the Stakeholders

Participants P3, P5, and P9 stated that it is important to know the library's stakeholders. P5 claimed that Go8-1 library had put a lot of work into knowing their stakeholders.

All participants in the initial sample were able to describe their stakeholders in detail. Both American participants began by stating that the state and its citizens were stakeholders. They were both aware of the university's role in providing future employees for their states:

> *We are also in the State of ---, so we contribute to the society by preparing current and future employees to contribute to the, both civic society but also the economic development of the region. We recently received [xxx] million dollars from the State Legislature so we're also beholding to the State in terms of ensuring that our outcomes realise their return on investment.* (P1, interview one)

In general, for most of the research participants, the university's extended community included alumni (P7), the business community (P4, P8), donors of collections (P3), and donors of money for collections (P5). Participants reported that the community also includes community groups such as friends of the library (P6), paying community members (P6, P8), reciprocal borrowers with limited use of the library (P4, P8). P8 mentioned the use of private provider agreements, but said they were ceasing these as they were not used.

P2, P3 and P4 remarked upon the work that goes into providing services to schools. This activity builds relationships with schools, whose students are potential university students (P2, P3, and P4). A final community stakeholder mentioned by participants was the Technical and Further Education (TAFE) college sector. RUN-1 and IRU-2 had agreements with TAFE colleges, which were seen as feeder institutions that provide students for the university (P4, P7).

The University Librarians also stated that University administrator stakeholders included the University Council, Vice-Chancellor, Deputy Vice Chancellor, senior executive and senior management of the university (P1, P5, P7, P8, and P10).

The university staff members identified by the research participants included the academic community and non-academic staff. Academic staff members included the teaching staff (P1, P4, P6, P7, P8, P9 and P12) and researchers (P2, P3, P4, P5, P6, P8, and P10). Once again, teaching faculty and researchers had a high priority. P8 and P2 were conscious of non-academic staff as stakeholders, and P2 emphasised the importance of technology and e-learning staff as major stakeholders:

> *The Division of Technology, Information and Learning Support - we have ITS as part of the Division and obviously in other academic libraries that's not the case. So, the maintenance of key stakeholder relationships has been easier because we are in the same division, in the TILS Division, and to be able to work and align more closely with ITS, Learning Environments Technology services, which is LETS, and e-Learning services as part of the division are really quite critical.*

P3 identified independent researchers as an important stakeholder:

> *Independent researchers are very much a stakeholder of ours. We've got a project where we're digitising our special collections, and we've got*

independent researchers from around the world who [sic] are using some of the unique collections that we have.

Students (both undergraduate and postgraduate) were acknowledged by the majority of the University Librarians as important stakeholders (P1, P2, P3, P4, P5, P6, P7, P8, P9, P10, and P12). P6 remarked upon the diversity of the student population, which included domestic students, international students and off-campus students. P6 also defined the postgraduate students as both coursework and research students. P10 made little remark about undergraduate students, focusing instead upon research students. P4 and P7 focused upon the undergraduate students, which included first-year students, mature aged students, first-in-family, tertiary prep (P4), and TAFE students (P4).

Developing an engagement framework

Some of the University Librarians expressed interest in an engagement framework. P5 referred to a framework being developed by CAUL:

So what we've been doing in CAUL has been actually having a serious look at engagement and defining who our stakeholders are. We've been using a sort of a common template to actually bring a bit of process and thought to the way that we actually identify who our stakeholders are and develop strategies that point to each of those different stakeholders.

P6 discussed an engagement framework that was being developed at Go8-2 library:

I guess that's why we're investing resources in developing an engagement framework so we're looking across the organisation and building relationships at a number of levels.

In order to develop an engagement framework, the following strategies were used by the participants:

- Developing a whole of organisation approach
- Recognising different strategies for different stakeholders
- Communicating with stakeholders in their own language

Developing a "Whole of Organisation" Approach

According to P6, this framework entailed a "*whole of organisation approach*", requiring the involvement of all levels of the library in engagement with stakeholders (P2, P5, P6, and P8). P6 remarked:

> *It needs to be a whole of organisation approach. It's not one person building a relationship with another person, or even one person developing a relationship with a group.*

P8 emphasised the importance of liaison activities at all levels of the library. P8 talked about his role in liaising with the Deans and Heads of Department. He stressed that he wanted to know about the other networks his managers engage in, in order to share those networks with others. These networks, collaborations and liaisons are elaborated upon further in Property 3D: Engaging internally within the university (section 5.5.5).

Recognising Different Strategies for Different Stakeholders

P5 stated that there are different strategies for different stakeholders. P6 pointed out that it is the same message about the library, but it is "*scaffolded*" across different levels.

Communicating with Stakeholders in their own Language

A number of university librarians specifically referred to the importance of communicating with stakeholders in their own language (P3, P8, P9, and P10). As stated by P3, the language must be meaningful to stakeholders:

> *I think there's [sic] lots of things in which you can determine your relevance to stakeholders, but probably the most important thing is how you communicate that. You have to communicate it in a manner and in a language which is meaningful to your stakeholders. So that it isn't in your own nomenclature. It is in terms of the audience that you're trying to communicate with.*

P4 and P8 emphasised the importance of being honest with stakeholders about the library's ability to deliver on its promises. P8 stated this was important because it creates a relationship of trust:

> *When we've not managed to do something correctly or not delivered the space that a student or researcher wants, we'll freely admit "No, that hasn't*

worked, and we're working on correcting it." We don't try and hide things with spin. We try to be honest.

Students use different terminology from university administrators, and P8 stated that different communication channels were used for different stakeholders. P1 and P9 emphasised the importance of communicating with administrators in the language of the university. P1 was also aware of the power of language when referring to the three different institutions the library served:

> *So in the case of the community college, we are meeting with the president, the provost, and five deans, to ask them how we should communicate with that organisation about budget, collections, services and technologies.* (P1, interview one)

5.5.4 Culture: Property 3C: Encouraging an Engaged Culture

An engaged culture requires a customer focus and a team culture which both reflect the gregarious, open, friendly and collaborative culture that P8 emphasises. Customer focus was mentioned by a number of participants (P1, P2, P3, P4, P5, P7, P8, P10, and P12) and is elaborated upon in Property 4C: Building a customer focus, in section 5.6.4. Team culture was also important to participants and is expanded upon in Property 4E: Building team culture, in section 5.6.6. However, the data is included here in Table 5.4.

5.5.5 Mechanisms: Property 3D: Engaging Internally Within the University

All participants discussed their strategies for engaging with their university stakeholders. These strategies included:

- Formal mechanisms for engagement set by the university

Strategies also involved informal mechanisms with the various stakeholders:

- Engagement with the highest administrative levels of the university
- Collaboration with departments and faculties across the university
- Liaison with academic staff
- Supporting researchers
- Engaging and retaining students

Formal Mechanisms for Engagement

P9's Advisory Board included both faculty and students. P7's Library consultative committee was used as a test group, with faculty being asked to discuss ideas with their faculties. P11 also had a Library Advisory Committee.

P2 reported that ATN-1 library was subjected to a series of formal reviews which involved faculty or external staff. Likewise, P11 described a five-yearly cycle of formal reviews. P4 and P6 also stated that their libraries underwent formal reviews. P4 explained:

> *We have here at the university, a review cycle so that all the programs are reviewed on a regular basis. As are each of the departments – each of the support departments, and those reviews are an external review and they're taken quite seriously.*

Engagement with Highest Administrative Levels

The University Librarians reported that they also had the opportunity to communicate and engage with the University executive (P2, P4, P5, P6, P8, and P10). While University Librarians are generally not directly on the University Executive, but are situated further down the university structure, P10 talked about working closely with the Deputy Vice Chancellor for Research. Indeed, several librarians mentioned the importance of the library's work with the institutional repository as a source of engagement with the senior executive. P10 and P11 stressed the importance of this work in providing important data about the research outputs of the university:

> *…the institutional repository, which reflects the publication output of the university. It's used by the university, for the government research output reporting exercises – ERA and HERDC - the annual data collections. We use that database to provide services to the senior executive about university research collaboration - article publications – who's publishing with whom.* (P11)

> *If you google webometrics repository rankings you'll find the link. It's one of the many kinds of links that are out there, but it is something that captures the attention of the Research Office and of the Vice-Chancellor. So that has been one of our proxy measures in terms of looking at, you know, how well*

has our internal strategy been having any particular effect; and visibility is absolutely a key outcome that the DVR and VC are seeking. (P10)

The research participants mentioned their upward reporting structures. P5 reported working through the Vice Principal Engagement, and was part of the Chancellery Executive. P4 reported to the Director of Information Services. P2 reported to the Deputy Vice Chancellor TILS. Only P2 suggested occasional direct access to the Vice Chancellor through "*strategic walk arounds*". Participants P5, P6 and P8 engaged directly with Deans and Heads of Department. P5 and P6 mentioned being on the Academic Board as a means of engaging with the senior academic staff. P5 also discussed the importance of being present at the annual Vice Chancellor's retreat. This informal mechanism, allowed him to be seen, to engage with the Heads of Department, and to discuss the Vice Chancellor's future directions.

P4 stressed the importance of the library communicating openly with a responsive administration:

There's been a really concerted effort to keep people informed and to have a two way channel of communication. It doesn't always work perfectly, but there's been a concerted effort to do that.

Indeed, the importance of cultivating and maintaining good relationships with administration by developing a good reputation is discussed further in Category 4: Building an agile and engaged culture. The responsiveness and support of the administration is sometimes an area over which the University Librarian has no control, and is discussed further in Chapter Six.

Collaboration with Departments and Faculties across the University

Collaborating across departmental boundaries in the university was regarded as important by many of the University Librarians who participated in this research (P1, P2, P3, P4, P5, P6, P7, P8, P9, P10, and P12). Collaboration can be achieved across the university through formal partnerships or through informal collaborations with other departments or faculties. This was variously called "*networks*" (P8), "*developing relationships*" (P2, P4), "*partnerships*" (P5, P7) or "*collaborating*", or is described below as:

... who we need to work with so we get those synergies of effort. (P10)

...effective liaison with the core stakeholder groups. (P6)

> *Finally I would say we spend a lot of time with our students and the faculty.* (P9)

P8 and P10 stressed that collaboration was important, because it was the only way to achieve the most effective impact across the university, as P10 stated:

> *…because the goals that our Vice Chancellors throw at us now are big, hairy, audacious goals. Goals of that scale can often not be achieved by individual units alone. The danger of even attempting to do it that way is that we often provide siloed or fragmented responses.*

P8 emphasised the power of networks, the need to use the networks strategically, and developing a reputation as a contributor to networks. Moreover, he stated that it was an ongoing task that was never completed. P3 cited more informal relationship building through lunch with colleagues from other departments, while P4 cited the more obvious daily relationship building that occurs through frontline client services. P1 observed that relationship building occurred by using the "*library as a lab*" for faculty and students. P9 simply called it "*spending time*" with students and faculty.

Some participants stressed the importance of developing formal relationships (P7, P8, and P10). P8 mentioned the importance of trying to persuade potential partners of the value of the collaboration. Collaboration or partnerships involve the creation of formal partnerships with other departments, faculties, or with individual faculty members. Partnerships benefit the library in many ways. They create efficiencies and improvements to services, and prevent the duplication of services. Some participants reported that collaborative partners can also provide feedback on deficiencies in the library service (P2, P8, and P10). Finally, according to P2, P3, and P5, partnerships created mutually beneficial relationships, where both partners can advocate each other's services.

The research participants reported the following collaborations or partnerships:

- Collaborating with Careers Services in helping students with careers (P8)
- Design thinking workshops (P8)
- Collaborating with Teaching and Learning and various faculties on digital literacy (P7)
- Collaborating with divisional or branch colleagues (P2, P4, P7)

- Helping with English language assistance (P8)
- Working with Financial Services (P6)
- Collaborating with Fundraising and Engagement (P3)
- Working with Information Technology (P2, P3, P10)
- Collaborating with Learning and Teaching (P1, P2, P7)
- Partnering with Marketing and Communications (P5)
- Collaborating with Research Services (P10)
- Working with Student Services (P5, P7)

According to the research participants, collaboration also meant regular meetings with other administrative areas (P6) and library representation on various cross-university project teams (P3, P4, P8, and P10). The library was also represented on university committees (P1, P2, P3, P4, P6, P7, and P8), performing the dual purpose of placing the library in a prominent position to provide information/promotion to the relevant group of people, while also allowing the library to receive feedback about its services (P2). Participants reported that these committees included the Academic Board (P6), research committees (P7), or Teaching and Learning Committee (P6).

Liaison with Academic Staff

Liaison or outreach to the academic community was regarded as crucial to library operations by all participants. P3 stated that the role of liaison librarian was incredibly important. It enabled the library to provide value-added service to academics. It was regarded as important because academic staff can sometimes be resistant to change. For some of the participants, staff resistance to change has manifested in negative or adverse feedback, particularly from academics. P5 listed the ways in which this has occurred: nasty letters, newspaper protests, and website protests and revealed:

> *When I was first hired here the Chief Provost told me one of my key performance indicators was to make sure that we weren't on the front of the daily newspaper with adverse feedback from academics.*

According to the participants, liaison was done in two ways. Firstly, the library worked with individual academics through liaison librarians; and secondly it was

done by working with academics on projects. Some of the participants specifically mentioned the role of liaison librarians in providing one-on-one help or engagement with academics (P2, P3, P4, P6, P8, P10, and P11). P9 commented on the importance of spending time with faculty. P4 described the good relationship RUN-1 library had with academics, allowing the librarians to act as mediators between students and academics when there were problems with units or assessment. The liaison librarian role also helped the library to receive feedback from academics (P4, P8). P4 observed that liaison librarians gave individualised help to academics with little experience in research or publishing.

The research participants reported that their libraries also worked in partnership in individual academics by collaborating on projects. These were mutually beneficial projects that promoted the work of academics and also promoted the library. P8 and P10 discussed collaborating with academics about research projects that can be promoted and brought to life by curated exhibitions and projects. P10, in particular referred to an interactive project:

> *This is quite an exciting project for us, in terms of: without their input, their research passion, their research skill and interest, we could try and design something, but it doesn't have the rigour, the pedagogy, and so forth, that should sit around this kind of project.*

Liaison librarians also formally liaised with whole faculties by attending internal faculty meetings (P5), or sitting on faculty advisory boards (P2). P5 stressed that this method was of mutual benefit to both parties by creating better communication and relationships. Some examples of these collaborations with faculty resulted in partnering on MOOCS (P5), and testing new systems/products (P7). In a more novel way, P1 explained the "*library as lab*" approach of USSU-1 library, where the library invites academics to use the library as a laboratory for its students - involving itself formally as a subject for student research.

P12 found the participation of academics in focus groups to be valuable for her restructuring project. P12 commented that academics had a far greater appreciation than students, of where academic libraries should be moving in the future:

> *I think that's because academics think more, at a higher level. They have a more umbrella view of, theoretically, the place of the academic library … and academics are very mobile. They have worked at different universities;*

they have seen different things across the world. They have a richer experience to draw on.

Supporting Researchers

The Australian participants talked at length of the need for better support for researchers because of the recent changes to government funding policy (P2, P3, P4, P5, P6, P7, P8, and P10).

P2 noted the challenge of determining how to support researchers better and pointed out that the research support team had expanded significantly in recent years. P10 explained the function of the research outreach team of IRU-3:

So we now have an academic outreach team whose responsibility is to work or to go out and meet with members of the research community, understand where they're at within the research cycle, and get a better understanding of what their particular needs or expectations may be at that point of time, and look at how we can address some of the needs or barriers, whether they're real or perceived and also point them to or connect them to services, whether they're within the library or within other professional services units.

The idea of academic outreach was also used in IRU-2 library. P7 provided an example of researcher feedback about this support:

…individual researchers will meet me in the coffee queue and say "I love the fact that the library sends someone out when I have a problem with the research system" (P7, interview two)

Once again supporting research and researchers was reported as mutually beneficial for both the library and the researcher. P3 indicated that researchers were often attracted to IRU-1 University because of its research profile and because of the breadth and quality of library collections, stating:

…when I talk to academics, especially academics that have come from other institutions, both research institutions and universities from other countries, they're very impressed with the breadth and the quality of our collections. They can often get things through us that they couldn't get through other places… (P3)

P1's "*library as lab*" benefited research students in the following way:

The students use us as the customers. They interview us, they conduct focus groups; in one instance the customer included the master planner on

> *campus, the architect for the renovation, included our head of IT within the library – it was a human factors course so very technology intensive. I was a customer as was the Associate University Librarian who is responsible for elaborating the public programs and services. We met with them throughout the course. They shared preliminary ideas, they heard our responses. At the end there was a public presentation…* (P1, interview 2)

Conversely, the library's relationship with researchers benefits the library by helping it to understand researcher needs throughout the research cycle, and thus enabling it to provide better services. P1 stated the benefit of "*library as lab*":

> *That experience both provided content to staff, but it also gave them insight into various disciplinary traditions for research. So as they think of generating their own questions, it gave them a toolkit, if you will, of increasing knowledge about various ways within the social sciences or the sciences, of conducting and presenting research findings.* (P1, interview 2)

P7 remarked on the library's engagement with researchers:

> *We've had a great year this year engaging with researchers. Those researchers talk to each other and we can see from the information that we're getting back to us, but also from the conversations that are going on in meetings, that researchers are engaged with the library, and to me that demonstrates that if they're engaged with the library and what the library's doing, we're obviously relevant to what they're doing, and therefore, to the university.* (P7, interview 1)

P10 stressed the need to encourage researchers to better use the library's collections. P10 revealed that the library monitored its transactions with clients, thus bringing in useful business intelligence. P10 also noted informal feedback from researchers, which helped the library to understand researcher needs at every stage of the research cycle.

Another novel way of understanding the research cycle was undertaking usability tests (P1). P1 alluded to conducting usability tests to understand researcher workflow. P2 also mentioned a similar undertaking in ATN-1 library, where the library was testing electronic research notebooks.

Engaging and Retaining Students

Many of the participants claimed the importance of engaging and retaining students (P1, P2, P3, P4, P5, P6, P7, P8, P9, P10, and P12). This is part of the university strategy in many universities. In order to engage and retain students the library must understand student needs. This was expressed by the research participants as "*student needs*", "*desires*", "*wants*", or as "*student feedback*" (P2, P3, P4, P5, P7, P8, and P9). P8 also mentioned the necessity of being aware of popular culture.

The way to gain an awareness of student needs is to gain both qualitative and quantitative feedback. Quantitative feedback includes formal survey methods, which were mentioned by many university librarians as the primary instrument for student feedback (P2, P3, P5, P6, P7, P8 and P9). P8 acknowledged libraries' dependence upon surveys, but expressed dissatisfaction with the survey:

> *My view is: I've never been convinced that surveys gauge that very well. I mean I don't fill out surveys very frankly or honestly because they're affected by the mood I'm in at the time. I hate filling surveys out. I'm sure a lot of students are the same. We attach so much weight to surveys because it's regarded as real data. But it's raw to some extent, and many of the surveys run by universities are so lame and so standard and so uniform that you don't get any real data out of it.*

P12 echoed this view in evaluating survey results, acknowledging that poorly framed questions can produce inadequate results:

> *I think if we had framed it differently to say "For the student body, what's more important", they might have had a different response.*

For the research participants, quantitative research also included the collection of statistics (P2, P3, P6 and P10). The types of statistics collected by participants varied: from the number of customer queries (P10) or literature searches (P6); to more sophisticated methods as P1 reported:

> *It can include, for example, return on investment regarding a resource, licence costs, divided by numbers of downloads – so quantitative.* (P1, interview 1)

Many participants suggested that qualitative feedback was also important (P1, P3, P5, P7, P8, P9, P10, and P12). There are formal and informal methods of gaining

qualitative feedback. Formal methods nominated by participants included engaging users in participatory design and focus groups. P1 explained the participatory design philosophy thus:

> *We also have a participatory design philosophy regarding both [library] services, but particularly technology enabled systems and services, and so with that we engage members of the community in usability tests and other, um, really learning activities both for them and for us that give us insight into researcher workflow, for example.* (P1, interview 1)

P1 claimed its success:

> *It's worked very well – to involve these stakeholders in our decision making and direction-setting* (P1, interview 2)

P12 also engaged users in participatory design in the restructure of RUN-2 library. This was done creatively in three ways: using creative competitions to engage students; asking students to respond to questions that were on a public blackboard; and using academic skills help groups for feedback. Another formal way of obtaining qualitative data was through focus groups (P3, P5, and P7), while P9 also described meeting with the student government.

Informal methods of obtaining feedback included the general day-to-day involvements with students (P4, P9 and P10) and simple observation of student behaviour (P1, P8). P5 and P8 regarded their online engagement with students as very important:

> *Our online activities are seen as very important – to be engaged with, not just students, but also with management and faculties; so we are seen as co-operative in that endeavour. So, because of that, social media is important – it's a subset of that. We've led the university landscape in that and others have followed what we've been doing.* (P8)

P5 and P8 reported that they worked with students more directly by allowing them to curate exhibitions and collections, and by providing internships in areas such as branding or web design. More importantly, P5 and P8 claimed that the best student feedback came from employing students. Student employment, according to the participants, provided dual benefits. Students perform a job for the library that cannot be done by general staff because the students interact very well with their peers; they also provide valuable feedback on how the library can improve its

services (P5, P8). The students help the library to improve its communication with students, as P8 asserted:

> *...having students actively involved in the library to help us translate what we might use as, middle age to middle age language, into middle age to student language. They're telling us that some of the terms we are using are lame – "don't use that term or this term".*

Responsiveness to feedback is very important (P2, P4, P5, P7, P8, and P9), as stated by P4:

> *We try to ensure that with all of our staff that with anything they are dealing with, that they follow through. If an issue is raised or a problem, that they not only take it and acknowledge it, but that they follow through, and it might be often something that they can't resolve, or that they can't necessarily answer, but to make sure that they take it where it needs to go.*

Some participants emphasised the importance of reporting back to students on the action taken in response to their feedback (P2, P4, and P5), as P2 pointed out:

> *The other thing that we do is that once we make a decision of what priorities we are going to undertake to meet the feedback of our students and staff, we then report on it. ... So, again it's pointing out that you can tell us what you'd like to see, and you know, not obviously, not everything happens at once, but that when an action happens, especially a major one, it's then identified back to the students and staff to say it's an improvement, and thank you for your feedback, but we've acted on it.*

Another way in which the libraries engaged their students was through the library's participation in learning and teaching activity which involved the teaching new literacies or multi literacies. The data is explained previously in section 5.3.4.

Finally, according to several participants (P2, P3, P5, and P8), university libraries engaged with their students by promoting the activities of the library. P2 and P5 used posters to promote their library services. P3, P5 and P8 made extensive use of social media such as Facebook and Twitter. Social media was used to promote the library in quirky ways. Some of the participants offered students prizes for taking part in surveys and competitions. P5's library, Go8-1, was enormously active in providing events and barbecues.

5.5.6 Mechanisms: 3E: Engaging with External Stakeholders

External stakeholders were also important to the majority of participants (P1, P2, P3, P4, P5, P6, P7, P8, P10, and P11). Engagement with external stakeholders included the following mechanisms:

- Community engagement using space
- Community engagement using communications media
- Engaging with donors
- Involvement in external organisations
- Participation in the library sector
- Promoting the university to local schools and feeder organisations

Community Engagement Using Space

Some participants reported that library spaces were an important way to promote the library to the extended community (P5, P6, P8, and P10). The use of library space is explained earlier in section 5.3.4.

Community Engagement using Communications Media

Some participants reported that an important means of engaging with external community stakeholders is the communications media. P5 and P3 indicated that they used social media such as blogs, Facebook or Twitter, to publicise their services and collections. P5 remarked that the library of Go8-3 was able to promote the library through university publications and a supplement in the state newspaper. Go8-3 also had the unique ability to promote itself through publishing catalogues of art exhibitions that tour throughout the state. P3, from IRU-1 University, reported using the local newspapers and electronic media to publicise their unique collections.

Engaging with Donors

Participants also reported that another important external stakeholder was the donor. Once again, P3 highlighted the importance of the special collections librarian in liaising with donors. The liaison librarian was an important factor in gaining donations of collections that were important to the university in its specialist research areas. In contrast, Go8-3 University had the capacity to employ a fundraising manager to approach benefactors for special collections, specialist libraries, or renovations (P11). P5 revealed that Go8-1 library used third parties as "*champions*"

to advocate for monetary donations to its fundraising efforts. The library had acquired the archives of an internationally renowned Australian academic, and P5's fundraising efforts, with the help of champions had raised a million dollars in the previous year (2014).

Engaging with External Organisations and Communities of Practice

External organisations were also regarded as important stakeholders by the participants. P2 and P10 nominated collaborating with the Australian National Data service (ANDS), and P2 acknowledged ANDS as a source of funding for the library.

P10 also cited the importance of membership of communities of practice through their institutional repository.

Engaging with the Library Sector

The majority of participants emphasised the importance of engagement with other libraries (P1, P2, P3, P4, P5, P6, P7, P9 and P10). This allowed libraries to work collaboratively across the sector to share ideas (P1, P6, P7 and P9) and to collaborate in research (P1, P2). Therefore, for the Australian University Librarians, peak bodies such as Queensland University Libraries Office of Cooperation QULOC (P4) and CAUL featured significantly in the interviews (P2, P3, P4, P5, P6, P7, and P10). P1 emphasised the importance of international staff exchanges, along with study trips to a partner university in Sweden, while P9 commented upon the importance of liaising with other libraries such as public libraries.

Engaging with Local Schools and Feeder Organisations

The participants indicated that university libraries also engaged with potential students by running programs for local schools (P2, P3, P4, and P6). The libraries had relationships with students from feeder institutions (P8) and TAFE colleges (P4, P7).

5.5.7 Summary of Participants' Multiple Perspectives

Table 5.4 (below) provides a visual comparison of the data provided in this section. As the table shows, P5 was most concerned about engagement and contributed the most data at the time of the interview. The University Librarians of the two RUNs also expressed their focus on engaging with their stakeholders. P12 used engagement strategies heavily in order to gain evidence for the library restructure. The American university librarians spoke less about engagement than the

Australian university librarians, and fewer participants spoke about an engagement strategy (Property 3B: Developing an engagement framework).

Table 5.4

The Response of Participants: Category 3: Engaging with Stakeholders

PROPERTIES	USSU	ATN	IRU	RUN	Go8
3A: Coping with diversity of stakeholder requirements	*Stakeholder diversity (P2, P8)	*Stakeholder diversity (P2, P8)	*Student diversity (P7) *First year students (P7	*Student diversity (P4) *First year students (P4)	* Stakeholder diversity (P5, P6)
3B: Knowing the stakeholders: Community	*State and citizens (P1, P9)	*Business community (P8) *Paying community members (P8) *Reciprocal borrowers (P8) *Schools (P2)	*Alumni (P7) *Donors of collections (P3) *TAFE (P7) *Schools (P3)	*Business community (P4) *Reciprocal borrowers (P4) *TAFE (P4) *Schools (P4)	*Donors of money (P5 *Friends of the library (P6) *Paying community members (P6)
3B: High level university decision makers	*University executive (P1)	*University executive (P8)	*University executive (P7, P10) *University Council (P7)		*University executive (P5)
3B: Academic staff and researchers	*Teaching staff (P1, P9)	*Teaching staff (P8) *Researchers (P2, P8)	*Teaching staff (P7) *Researchers (P3, P10) *Independent researchers (P3)	*Teaching staff (P4) *Researchers (P4)	*Teaching staff (P6) *Researchers (P5, P6)
3B: Non-academic staff		Non-academic staff (P2, P8)			
3B Students	*Students (P1, P9)	*Students (P2, P8)	*Students (P3, P7, P10) *First year (P7)	*Students (P4, P12) *First year (P4	*Students (P5, P6)
3B: Developing an engagement framework Different strategies for different stakeholders					*Framework development CAUL (P5, 6) *Different strategies for different stakeholders (P5, P6)
3B: Whole organisation approach		*Engagement at all levels (P2, P8)			*Engagement at all levels (P5, P6)
3B: Using stakeholder language	*Using the language of the university (P1, P9)	*Honest communication (P8)	* Using stakeholder language (P3, P10)	*Don't over-promise on service delivery (P4)	

PROPERTIES	USSU	ATN	IRU	RUN	Go8
3C: An engaged culture	*Customer focused service (P1)	*Customer focused service (P2, P8)	*Customer focused service (P3, P7, P10)	*Customer focused service (P4, P12)	*Customer focused service (P5)
3C: Fostering collaboration with stakeholders	*Partnering through "library as lab" (P1)	*Ensuring staff are networking/ partnering with stakeholders (P2, P8)	*Recruiting staff with outward /collaborative focus (P7)	*Restructuring to ensure collaboration & engagement (P12)	*Partnering library with faculties (P5, P6)
3C: Responsive to stakeholder requirements	Responsive, flexible, agile (P1)	Responsive, flexible, agile (P2, P8)	* Responsive, flexible, agile (P10)	*Responsive, nimble, flexible (P4)	
3C: Promoting the library	*Presenting, defending, communicating, persuading university leaders (P1)	*Promoting the library (P2) *Forging a reputation (P8) *Creating visual identity (P8)	*Promoting the library (P3, P7, P10)	*Engaging (P12)	*Growth area of engagement (P5, P11)
3D: Engaging within the university: Formal mechanisms	*Library board (P9)	*Formal reviews (P2)	*Library board (P7)	*Formal reviews (P4)	*Library board (P11) *Formal reviews (P6, P11)
3D: High level decision makers	*Senior administrators (P1)	*Senior executive (P8) *Vice Chancellor (P2) *Deputy Vice Chancellor (P2) *Deans and department heads (P8)	*Vice and Deputy Vice Chancellor (P10)	*Director of Information (P4) *Importance of open two-way communication (P4)	*Vice Principal (P5) *Deans and Department heads (P5,P6) *Vice Chancellor's retreat (P5) *Academic Board (P5,P6)
3D: Departments and Faculties: Informal	*Library as lab (P1) *Spending time with faculty (P9	*Strategic networking (P8) *IT (P2)	*Informal meetings with colleagues (P3) *IT (P3, P10)	*Frontline client services (P4)	
3D: Formal partnerships		*Divisional or branch colleagues (P2)	*Divisional or branch colleagues (P7)	*Divisional or branch colleagues (P4)	*Other departments (P6)
3D: Project teams		*Cross university project teams (P8)	*Cross university project teams (P3, P10)	*Cross university project teams (P4)	
3D: University committees	*Committees (P1)	*Committees (P2, P8)	*Committees (P3, P7)	*Committees (P4)	*Committees (P6)
3D: Learning and teaching	*Learning and teaching (P1)	*Learning and Teaching (P2)	*Learning and Teaching (P7)		*Learning, Teaching (P6)

PROPERTIES	USSU	ATN	IRU	RUN	Go8
Various		*Careers services (P8) *Design thinking workshops (P8) *English language assistance (P8)	*Fundraising & Engagement (P3) *Research services (P10)		*Marketing & Communications (P5) *Student services (P5) *Financial services (P6)
3D: Liaison work with academic staff	*Spending time with faculty (P9)	*Liaison librarians (P2,P8)	*Liaison librarians (P3, P10)	*Liaison librarians (P4)	*Liaison librarians (P6, P11) *Attending faculty meetings (P5)
3D: Collaboration on projects	*Library as lab (P1)	*Research collaboration for curated exhibitions (P8) *Testing electronic research notebooks (P2	*Research collaboration for curated exhibitions (P10 *Testing new systems and products (P7)	*Including academics in focus groups (P12)	*MOOCS (P5)
3D: Supporting researchers:	*Library as lab (P1) *Mutually beneficial (P1)	*Expanding research support team (P2)	*Expanding research support team (P10) *Outreach to researchers (P3, P7)		*Academic board (P5)
3D: Engaging and retaining students: Knowing student needs	*Knowing student needs (P9)	*Knowing student needs (P2, P8) *Understanding student culture (P8)	*Knowing student needs (P3, P7)	*Knowing student needs (P4)	*Knowing student needs (P5)
3D: Gaining quantitative feedback	*Survey methods (P9)	*Survey methods (P2, P8) *Statistics (P2)	*Survey methods (P3, P7) *Statistics (P3, P10)	*Survey methods (P12)	*Survey methods (P5, P6) *Statistics (P6)
3D: Gaining qualitative feedback: Formal methods	*Participatory design (P1) *Meeting with student government (P9		*Focus groups (P3, P7)	*Participatory design (P12)	*Focus groups (P5)
3D: Informal methods	*Daily student engagements (P9) *Observation (P1)	*Online engagement (P8) *Observation (P8) *Student internships P8 *Employing students (P8)	*Daily student engagements (P10)	*Daily student engagements (P4)	*Online engagement (P5) *Student curators (P5) *Employing students (P5)

PROPERTIES	USSU	ATN	IRU	RUN	Go8
3D: Responding to feedback	*Responding to feedback (P9)	*Responding to feedback (P2,P8) *Reporting back to students (P2)	*Responding to feedback (P7)	*Responding to feedback (P4) * Reporting to students (P4)	*Responding to feedback (P5) * Reporting back to students (P5)
3D: Teaching & new literacies		* Maths, IT learning support (P2) *Multi literacies (P8)	*First year support (P7) *New literacies (P8)	*First year support (P4)	
3D: Promoting the library to students		*Social media (P8) *Posters (P2)	*Social media (P3)		*Social media (P5) *Posters (P5) *Library events (P5)
3E: Engaging with external stakeholders: Community		*Cultural space (P8) *Curated exhibitions (P8)	*Social media (P3) *Local media outlets (P3)	*Immersive exhibition (P10)	*Gallery space (P5) *Non-traditional space (P6) *Social media (P5) * Exhibition publications (P5) *Newspaper promotions (P5)
Donors			*Special collections librarian liaison with donors (P3)		*Soliciting monetary donations - fundraising/ advancement manager (P5,P11)
External organisations		*Australian National Data Service (P2)	*Australian National Data Service (P10) *Communities of practice (P10		
Library sector	Other libraries (P1, P9)	*CAUL (P2)	*CAUL (P3, P7, P10)	*CAUL (P4) *QULOC (P4)	*CAUL (P5, P6)
Schools and feeder institutions		*Schools (P2) *Feeder institutions (P8)	*Schools (P3) *TAFE (P7)	*Schools (P4) *TAFE (P4)	*Schools (P6)

5.6 CATEGORY 4: BUILDING AN AGILE AND ENGAGED CULTURE

Culture refers to the ethos or values of the organisation and of the attitudes, personal attributes and behaviour that are expected of staff members of the library. The term "*culture"* was used by P2, P7 and P8, but only P7 and P8 emphasised the importance of developing culture:

> *So one of the things we are trying to do is build a culture where we do demonstrate our relevance on a day-to-day basis and we're very customer focused.* (P7, interview 1)

> *There is an organisational culture there that I'm pretty sure: it's a very gregarious, open, warm and welcoming culture within the library and we're pretty active. It's not too rigorous or hierarchical.* (P8)

While the term "*culture*" was only explicitly used by two participants, it was implicit in the statements of other University Librarians (P1, P4, P10 and P12). Therefore, the University Librarians used words such as "*nimble*", "*flexibility*", "*agility*", "*best practice*", "*professional practices*" and "*customer-focused*" to describe the culture, social norms, values or attributes of a library that is relevant (P1, P4, P7, P8 and P10). P12 also used the phrase "*moving to a new state*":

> *So we did a series of workshops just led internally, about we're moving from this state to a completely new state that we will design ourselves, but we're not having any hangovers from the last state, so you have to let go of all your baggage and be prepared to move into the new state.* (P12)

P7 emphasised the importance of the workplace culture:

> *You can push as hard as you like to show how relevant you are, but if that's not being demonstrated by your workforce, then it's not going to go anywhere.* (P7, interview 1)

The University librarians indicated the kind of culture they required and the attributes the library needed to have in order to maintain relevance (P1, P3, P4, P7, P8, and P10). Many of the participants made it clear that they wanted a library that could adapt itself quickly to changes in its environment, solve problems, and adapt services for the benefit of its stakeholders:

> *…so that when something out of the blue develops, we have a nimble and resilient workforce that naturally knows to collaborate.* (P1, interview 2)

So, we've got to be pretty nimble. (P4)

...so now we're looking for people who may not have the depth of experience in librarianship, or the depth of experience in higher education, but bring those customer service skills and that ability to be agile in what they do. (P7, interview 2)

So we have the flexibility and the agility to be able to move off in different directions at, in a much more timely, probably a much faster way than we've ever been able to do before. (P10)

The research participants remarked that an agile culture does not get overwhelmed by change (P3). P8 stated that agility requires constant awareness of change and according to other participants there is willingness to move with that change (P4, P5). An agile culture also sees change as an opportunity to expand the influence of the library (P7). This is done by identifying emerging needs (P7), and then identifying what the library might do to meet those needs. P1 stressed that a change in culture takes time and practice. P7, as quoted above, also stressed the need for the library to be customer-focused or engaged with its stakeholders.

The research participants also reported that they required a culture where the library is continually striving to be best practice. According to the participants, becoming best practice begins with the continual evaluation and review of its services (P7, P8), collections (P7), its learning systems (P1), and its professional practices (P1). P8 emphasised:

We don't want to just qualify and benchmark against others by qualifying. We want to get a medal. You don't get medals by benchmarking against best practice. You become best practice. (P8)

5.6.1 The Process of Building an Agile and Engaged Culture

The process of building an agile and engaged culture begins with the problem of the culture of complacency (Property A). The library responds with the *strategy* of future proofing the workforce (Property B). This relationship falls within Glaser's *strategy* theoretical coding family (Glaser, 1978, p. 76). This strategy is achieved by focusing upon achieving four intertwining and mutually beneficial goals: Property C: Building a customer focus; Property D: Building a learning culture; Property E: Building a team culture; and Property F: Building a creative culture. The mutually beneficial nature of these relationships means they belong to Glaser's *interactive*

family of codes (Glaser, 1978, p. 77). These strategies are mutually beneficial because excellent customer service is achieved by learning from customers about their needs. The learning achieved from feedback then benefits the customer when it is acted upon. A team culture also means that the customer is served more efficiently by the entire team who are able to make a quick decision without referring the decision to a manager. Also, as is shown in the data below, customer feedback and participation in library experiments cements a strong relationship between stakeholders and the library. Creativity enables the library to communicate with its customers, learn from them, and act as a team in various creative ways. Properties C, D, E and F belong to Glaser's theoretical coding *means-goal* family (Glaser, 1978, p. 77). Properties C, D, E and F also fall within Glaser's (1978, p. 77) *cultural* theoretical coding family.

Figure 5.4 (below) demonstrates the process of engaging with stakeholders (Glaser, 1978; Saldaña, 2013, p. 251). In short, the figure shows that in order to address the existing culture of complacency, the library must be customer-focused, team-oriented, continuously learning, and creative.

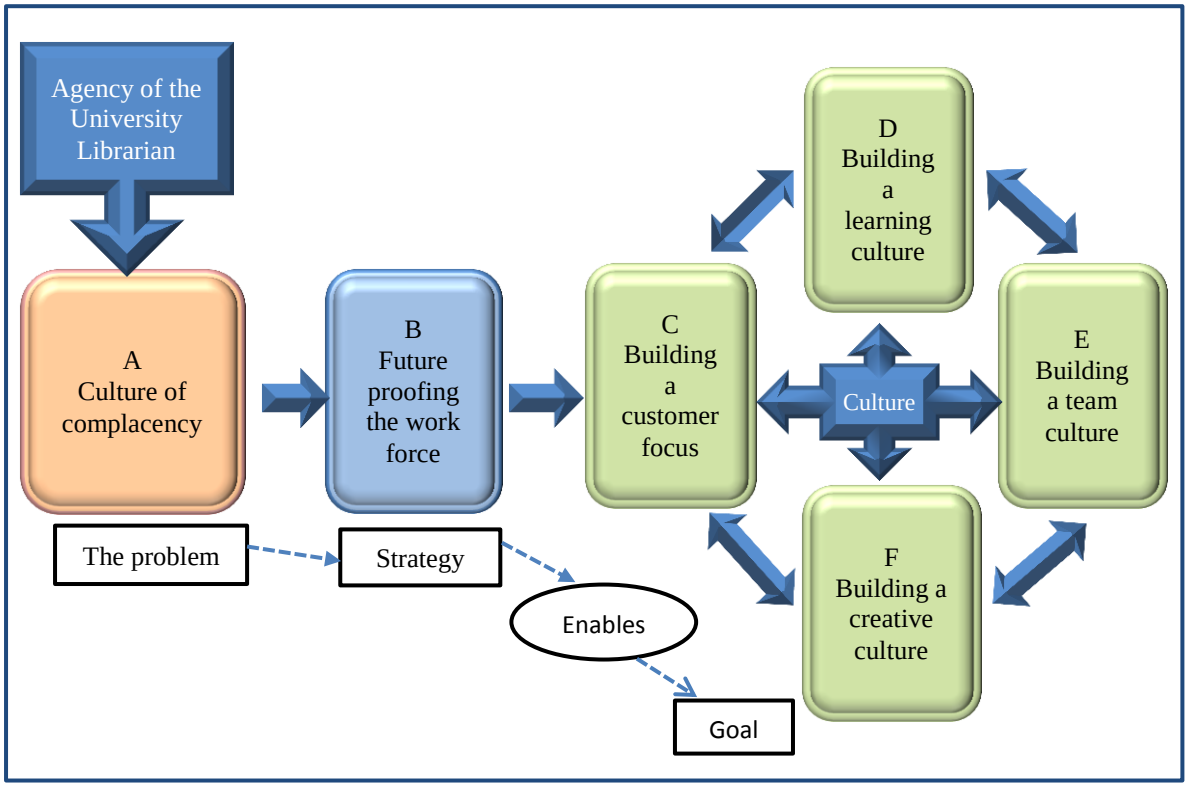

Figure 5.4. The process of building an agile and engaged culture.

5.6.2 The Problem: Property 4A: Culture of complacency

A number of participants noted that a culture of complacency currently exists in university libraries (P2, P3, P4, and P7). P3 noted that libraries have tended to be passive about their requirements, which has worked against them in that they have been forgotten by administrators:

> *There's an attitude that libraries and librarians always cope with whatever you throw at them and that they're good managers and they do very well in their universities, therefore you don't have to pay attention to them.*

P7 expressed a similar concern:

> *I worked in a state library for many years before I moved into universities, and in state government, your relevance is always highlighted to you every budget cycle, because you are up against health, education, police; and so money's very hard to come by. In universities, money is never easy to come by, but my impression, and you're only getting my opinion on this, but my impression in moving into universities, was that there wasn't the same sort of sense of a need to prove that you are relevant, and there was a certain complacency about "people think the library is a good thing". That complacency concerns me, and it particularly concerns me in the current political environment, and what's happening in the federal government. And we found through our restructure, that the library took a cut just like everyone else; quite a substantial cut. We can no longer rely on that, that we are a good thing.* (P7, interview one)

P4 and P12, as managers of smaller RUN libraries, were acutely aware of the staff struggle with change, and of the need to change their attitudes. P12 worked with staff members to address their fear of the restructuring process, while P4 worked with staff to change their attitudes to new procedures:

> *I think some of our staff struggle, as do they anywhere, with the challenge of change, and coping with change, and not worrying too much about that unnecessarily.* (P4)

P7 stressed the importance of overcoming this problem because:

> *Again, you can change your services to meet needs, but if your staff are dragging their heels, or if they just continue maintaining the services that they wish to maintain, it does make it hard.* (P7, interview one)

5.6.3 Strategy: Property 4B: Future-proofing the Workforce

"*Future proofing the workforce*" is an in vivo code derived from the second interview with P7. While the participants contributed less data to this property, as shown in Table 5-5 (below), most of them spoke about the requirements needed to make the library relevant for present and future needs (P1, P2, P3, P4, P5, P6, P7, P9, P10, P11 and P12). P10 asserted that the workforce of the future requires the capabilities that make the library relevant. P1 emphasised the necessity of having an agile and resilient workforce. Therefore, it appears that future proofing the workforce implies that instead of maintaining current skills, staff members are required to have capabilities that show flexibility and the ability to learn new skills. In other words, the University Librarians in this sample were seeking learning potential in their staff members. This requires a major cultural shift in workforce attitudes.

According to the data, an organisational cultural shift can be achieved with the following strategies:

- The leadership of the University Librarian intentionally leading and modelling the culture of the library
- The redirection of staff so that their skills are aligned with the library and university strategy
- Succession and workforce planning to achieve strategic goals.

Intentionally leading and modelling new staff culture

P1 made changes to the way decisions were made within the leadership team. P1 described how important it was for leadership to model collaborative evidence-based decision making:

> *…modelling the basics of information literacy; the formulating of questions; the consideration of what is authoritative knowledge; modelling how to analyse and interpret and present information.* (P1, interview two)

Redirecting staff for strategic alignment with university

One of the biggest challenges for many participants was redirecting library staff so that their skills align with university and library strategy (P1, P2, P4, P5, P7, P9, P10, P11 and P12). P2 was very direct in stating that traditional skills were required less in the technological environment (P2). P7 was even more direct:

> *The sort of skills that they might have needed twenty years ago are not the skills necessarily that they'll need now.* (P7, interview one)

Indeed, P11 stated that Go8-3's strategy was to reduce staffing in areas where demand has shrunk and to invest in areas of growth. Therefore, P9 explained:

> *So as vacant positions are available, then we direct those vacancies towards the most pressing needs within the libraries.*

For P12, the areas of future growth will be in collaboration and engagement:

> *When we do restructure, a lot of our impetus will be about collaboration and engagement. They will be kind of our themes of how the library operates.*

P10 asserted that the library was directing staff towards the university's research strategy. P2 stated the requirement for hardworking senior management who are willing to take on huge workloads, and P1 stated that management require superior dialogue and reflection skills in order to engage in collaborative decision making. The non-traditional library roles required for the future included: business analysts (P2), data managers (P2), information management specialists (P2), project managers (P2), staff with specific technical skills (P2), and web managers (P5).

Succession and Workforce Planning to Achieve Strategic Goals

How, then, do the participants obtain the new skills sets and personal attributes, and more importantly, optimise the potential of staff? Some of the University Librarians indicated that they use succession planning and workforce planning so that skills are available to face the future challenges (P2, P3, and P6). Workforce planning is done by participants in two ways. Firstly, attracting and retaining staff with the highest quality and relevant skills for a twenty-first century university (P2, P5, P6, and P7). Secondly, the staff must have the appropriate behaviours (P7) which enable them able to lead new service initiatives (P7 and P10). For P1, such behaviours included having staff that can react to challenges by problem solving collaboratively.

Some of the participants stressed workforce management that includes professional development so that staff members are able to add skills and change attitudes to future challenges (P1, P2, P3, and P6).

P7 explained that during the IRU-2 library restructure, the strategy to future-proof jobs involved re-writing role descriptions so that staff were able to demonstrate the potential and flexibility to take on future challenges:

> *So, much of it was about wording - how we worded them, but much of it was sending the message that these were roles that were described at a high level so that they were future proofed rather than roles that were being described in detail. It was also about describing the capabilities and the skills that we wanted in the role, rather than all the details about the individual tasks that we would be expecting people to do. They were quite high level, and that certainly threw some people when they looked at them. But it meant that we were able to say to people that the sort of person we want in this role is the sort of person who can look for opportunities, embrace opportunities, and then implement change within the organisation. Rather than keeping things running on a day-to-day basis*. (P7, interview two)

P1 and P3 stressed the necessity of individual performance plans, which were often reviewed on an annual basis (P1) or as a "*staff skills and knowledge audit*" (P3). In P4's smaller, very fast moving environment, this has not appeared to be as problematic as for the larger libraries. Rather than suggesting redundancies, P4 talked about the benefits of multiskilling the staff.

5.6.4 Goal: Property 4C. Building a Customer Focus

Many of the participants emphasised the importance of having a customer focus (P1, P2, P3, P4, P5, P7, P8, P10, and P12). P7 and P8 observed the importance of customer service. P2 emphasised that libraries have expertise in customer service, and P4 noted the importance staff place upon providing a quality service. According to P7:

> *I've had people say to me "the students are such a nuisance" and I've had to say "they're the reason we are here. Without them, we're not here". So it is about making sure that people are very [sic] focused on the customer, and what they need, and what we can provide, and continually showing the relevance of our services through that. That takes a certain set of skills and a certain approach, a certain culture and that's something that we're working on this year*. (P7, interview one)

The customer focus is encouraged in four ways:

- Fostering a service culture
- Fostering collaboration with stakeholders
- Being responsive to stakeholder requirements
- Promoting the library's services

Fostering a Service Culture

In order to foster awareness of stakeholders University Librarians were actively trying to recruit staff with an outward looking focus, and ensuring that they are actively engaged in networking with the library's stakeholders (P7, P8). Indeed, P12 stated that the library restructure would focus upon collaboration and engagement.

Fostering Collaboration with Stakeholders

Fostering collaboration with stakeholders was regarded by many of the participants as important. For example, P5 regarded the close collaboration with academic departments during restructuring as important in warding off any possible protest. By sending librarians into faculty meetings, the library was able to engender the support of heads of department. Fostering a collaborative culture was also emphasised by a number of participants (P1, P2, P6, P7, P8 and P12).

Being Responsive to Stakeholder Requirements

Another important attribute of a service culture is that, rather than being obstructive or rigid towards service requests, it is rapidly responsive to the requests and needs of its customers. P8 summed up the culture of ATN-2 library as "*a can-do culture*". Therefore, the terms that participants kept using were: "*resilient*", "*nimble*", "*flexible*", "*agile*", and "*responsive*" (P1, P2, P4, P8, and P10). P4 sums this up:

> *I think for us here, and possibly for everybody, it's being willing to be responsive, but also being really flexible so when you try something and it doesn't go the way you think it's going to go, rather than thinking, "Well that was a failure", taking a step back and thinking, "What happened there and what can we do", and going back to the stakeholders where we can and trying to work through with them what it is that they need and what we can do. I think we've just got to be very nimble.*

Promoting the Library's Services

The participants were also trying to encourage a promotional culture, where staff members advocate the services of the library. P8 stated on several occasions

that the library was trying to "*forge a reputation*". This has a dual purpose of helping the university community while also promoting the library, and thereby sustaining its relevance. P2, P5, P7, and P10 specifically mentioned promoting the library. P3 talked about "*selling what you do*" or "*you never miss an opportunity to tell a story*". P8, on the other hand talked about creating a strong visual identity through branding.

5.6.5 Goal: Property 4D: Building a Learning Culture

A learning culture means that all members of staff are learning, and therefore are able to change their work practices and behaviours. The majority of all participants highlighted the importance of learning, although this was variously called "*professional development*" or "*PD*", "*maintaining skills*", "*multiskilling*", or "*developing skills*". P1 identified learning as the most important challenge for the academic library:

> *So I see the biggest challenge as that of learning within the library staff: how to learn together; how to identify opportunities; how to evaluate priorities; how to ensure that our human and fiscal resources are well aligned with the most impactful outcomes that we can together produce.* (P1, interview one)

Analysis of the data shows that learning culture is built at two levels:

- University Librarian and leaders as the model for learning
- Staff learning

University Librarian and Leaders as the Model for Learning

Learning begins with the leader as the model (P1, P2, P3, P4, P7, and P10). P1 stressed several times that the University Librarian is also a learner. This philosophy has been learned from other thinkers from the academic world and from other librarians. P2 stressed the importance of learning from other library leaders. P2 had been intentionally observing the work of ATN1 library as this was a known library leader:

> *So I do think that that's an important stakeholder group [other libraries] because when I wasn't at ATN1 I was watching what ATN1 does, and knew what was happening and hearing about it and all that kind of thing and it's a really key tool in maintaining leadership and, again being benchmarked as a highly regarded library.*

Many other participants also mention the influence of CAUL and of other libraries in their management strategies (P3, P4, P7, P8, and P10).

P1 emphasised the need for leaders to learn, but also to model this learning to other staff. Therefore, P1 is part of the learning community, and explains that the shared leadership team "*learn together*":

> *They have learned, not only how to work together, but how to consider together and to dialogue together.* (P1, interview two)

Staff Learning

The University Librarians in this study also highlighted the importance of staff learning (P1, P2, P4, P6, P7, P10, and P12). P4 observed that multiskilling in the smaller library can be beneficial for staff. P7 emphasised the need for staff with the ability to learn:

> *We're trying to change the culture so that people don't wait to be told what they should be doing, but can actually feel empowered to see opportunities.* (P7, interview two)

Therefore, as mentioned in Property 2C: Developing learning and knowledge management infrastructure (section 5.4.4), professional development of staff was seen as highly important (P2, P4, P6, and P10).

How does professional development occur? A variety of learning processes were occurring in the participants' university libraries, and, in fact, P1 stated that learning is holistic. The participants identified several forms of learning that take place in their libraries:

- formal learning
- experimentation
- collaboration
- problem solving
- learning through play
- learning by doing
- reflection

Much of the formal learning is mentioned in Property 2C: Developing learning and knowledge management infrastructure (section 5.4.4). The types of formal learning mentioned by participants included workshops (P8, P12), conference attendance (P2), and writing papers for conferences (P3). It also included attending professional development events (P4), and conducting research (P2, P5, P8). Formal learning also included the systematic reviews of systems and services that were conducted and mentioned by P2, P4, P6, and P11. P4 and P11 stressed the need for extra training for staff when restructuring. P1 mentioned a formal system of staff learning exchange with an international university. P1 also had a sophisticated learning infrastructure that entailed unit forums and the monthly "*learning café*" for all staff.

Experimenting means testing ideas, technologies or systems to see if they are appropriate or effective (P1, P2, P4, P7, P8, P10). Experimentation ranged from a very simple trial and error testing:

> *So we started off by trying to run some classes or some training sessions and invite them in, but most won't do that. They don't want to come along and go "Hey, I'm the bunny who doesn't know about this". So then we've done a lot of one on one work with them with our faculty librarians and that's worked fairly well. There's an example, a really simple one, of try something. It doesn't work, you've immediately got to think, so what do we do that's going to work better.* (P4)

P7 specifically mentioned using the academics as a "*testing ground*" for new products and services. P2 stated that the library has a reputation for testing systems:

> *So the library has taken that lead as a central location, but, we never managed the print notebooks in the past, but because the library is, I guess, highly regarded and skilled in the area of testing systems that relate to research support, we've taken on that project.*

The terms "*collaboration*" and "*partnership*" appeared much in participant discourse (P1, P2, P8, P10, and P12). P1 emphasised the importance of the library staff learning together as a collaborative endeavour and P12 specifically engaged staff in learning by making them do a collaborative research project prior to restructuring. P2 used partnerships with other libraries for research. P8 mentioned that the library learned from the expertise of intern students. A variation of this is

where the library became part of the student laboratory, in what P1 calls the "*signature 'library as lab' approach*". Here, the library benefitted from the input of students, who used the library as a test ground for their projects. P10 also pointed out the importance of collaborative projects with faculty and researchers:

> *We try to encourage people from all areas of the library to participate in various projects. It's not dependent on [Higher Education Work] HEW level, or hierarchies. It's about looking at: how could participation in this project facilitate their professional development.*

Another form of learning occurring in the participants' libraries was problem solving, although P1 stated that it was more about the action of solving the problem:

> *...the focus is less on fixing a problem in fact the focus is not on fixing a problem. The focus is on identifying problematical situations and developing the collective capacity to consider possibilities.* (P1, interview two)

Participants mentioned other ways of learning that included learning from doing (P1) and learning through play (P8). P8 stressed the importance of allowing staff to make mistakes and to learn from the experience.

Finally, P1, P3, P8, and P10 stressed the importance of reflection as a means of thinking about processes, as P10 stated:

> *This year really is about experimentation, innovation, and deep reflection in terms of "are these the right things we should be doing", "what is the potential impact or value to the institution by adopting new approaches to the way that we might design or deliver some of our services, and what does that mean in terms of our internal – what does that mean in terms of organisational design?" So how do we reshape or recast the organisation?*

5.6.6 Goal: Property 4E: Building Team Culture

Building a team culture encompasses the intentional building or creation of a collective, collaborative culture which works toward a common goal. This is more commonly known as a team culture and the word "*team*" was used by many of the participants (P1, P2, P7, P8, P9, P10, P11 and P12). While the word was used frequently, it was not clear that all participants understood the attributes of teams. Nor was it entirely clear that all types of institutions followed this model. Some University Librarians paid particular attention to teams and a collaborative team culture: P1, P7, and P8.

The data reveals that the University Librarians in the sample indicated that they build team culture in five ways:

- Empowering staff
- Establishing an egalitarian approach to reporting structures
- Communicating openly with staff
- Encouraging collaboration amongst staff
- Working together towards a common vision

Empowering Staff

The strategy of empowering staff allows individuals to take responsibility for their area of work. This happens when they are permitted to solve problems without constantly referring decisions to managers (P7, P8, P9, and P12). This may also mean allowing a spending budget. A good example of individual empowerment was P9's reaction to budget cuts following the Global Financial Crisis (GFC). This had an enormous impact on staffing:

> *It's a great story. I wish I could take credit for it, but our head of Tech services is phenomenal and every individual within the library have been really creative about how to manage that smaller staff size. They're just an awesome staff.* (P9)

In a similar way, P8 reported an intentional policy where staff members are not to be closely directed or supervised:

> *Most of the supervisors now, certainly the directors, trust their professional staff to get on with their work. They don't closely direct them or supervise them. They're trusted to get on with their work.*

Staff empowerment was also important for P7, who stated that while there might be constraints such as risk management and resourcing, it is important that staff should not wait to be told what to do. Therefore, when P7 was writing position descriptions, leadership quality was considered important:

> *We had quite a bit about leadership in the PDs so even at a team leader position, for example, where it might be a level 6 position; we had leadership capabilities in there, because we want people to lead no matter what level they are*. (P7, interview one)

P12 also empowered staff to write up their roles and analyse them in the process of restructuring.

Not only do some participants allow staff to take responsibility for their work or area of expertise, but they give credit where it is due, as P9 stated "…*the team that I work with is incredible".*

The importance of empowering staff in order to enable better customer service infers a strong relationship between this property and Property 4C: Building a customer focus (section 5.6.4). Empowering staff also allows staff to engage in problem solving, and therefore improves their learning capability.

Establishing an Egalitarian Approach to Reporting Structures

The second strategy of establishing an egalitarian approach to reporting structures means a less rigid hierarchy. This allows better customer service by enabling staff to make service decisions more quickly, without referring decisions to supervisors. While this was the case in P8's library, P8 stated that it was not the case in all libraries:

> *I know that in some university libraries there is a much more rigorous, hierarchical, and less democratic way of governing the library. We're not like that. It's a much more free, more open process, but within certain guidelines, nevertheless. People are expected to behave in certain ways.*

P1 was also aware of the messages brought about by a more hierarchical approach, and particularly in the way it is communicated by language:

> *When I arrived there was a small group called the "A Team". Which is a regrettable phrase (FH laughs), because everyone else, presumably, was not "A quality".* (P1, interview 2)

This more egalitarian approach was communicated in other ways as well. For example, when bringing together project teams P10 used staff from all areas of the library, regardless of their level on the staff hierarchy. An egalitarian approach was evident in the approach of P12 to a restructure. P12 allowed each member of staff "*from highest to lowest*", to do an environmental scan. P7 also strongly agreed with this approach, in the assertion that all staff, regardless of their level, whether team leader or not were to take:

> *…a leadership role within their team, even if they weren't the team leader, because there will be and are opportunities for them, for example, to lead projects.* (P7, interview one).

Communicating Openly with Staff

The third strategy of communicating openly with staff is important because it helps to allay anxieties about future developments (P4, P8 and P12). P1 demonstrated the library's openness by publishing agendas and minutes on the staff internet and P10 published the library's goals on the library website.

P4 appreciated the communication from the Vice Chancellor and also the department director. P5 and P8 pointed out that that they talk to staff. P5 emphasised talks to each of the staff groups each year, while P8 stated:

> *We try to communicate honestly and frankly with all staff to make sure they are aware of what's happening in the broader university and in the sector. I regularly talk to them about that and keep them informed.*

Consulting with staff was also viewed by participants as important. The participants reported that consultation occurs at either the very sophisticated level that P1 has devised - a whole communications systems design; or simply in the general team meeting culture - "*staff and librarian meetings*" (P9). In the very political and sensitive environment of a major library restructure, P7 commented on the importance of consulting with all staff within the constraints of confidentiality:

> *…getting that that sharing of information - that collegiate sharing of information - and that joint decision making - was really important.* (P7, interview one)

P11 mentioned the long period of consultation and communication with staff as part of the restructuring process. This consultation process was prescribed by the university. P12's restructure also included a similar consultative process, yet it involved a more inclusive strategy, beginning with a series of workshops in an effort to alleviate staff fears.

Encouraging Collaboration amongst Staff

The fourth team building strategy that emerged from the interviews with participants is the encouragement of a collaborative culture. P1 stressed the importance of a culture that is collaborative and the importance of having a staff that

naturally knows how to collaborate. P7 also emphasised the importance of joint decision making, and for all staff to communicate their ideas for opportunities with other staff and leaders. Indeed, in the lead up to restructuring, P12 identified a need for staff to communicate and collaborate together:

> *From the first workshop it became clear that we needed more work just on communication and collaboration with the staff.*

Indeed, P12's efforts at inclusion had positive results:

> *…we had staff themselves suggest innovative new things to us rather than us imposing those things on them.*

Working Together Towards a Common Vision

A number of participants identified the importance of working together towards a common vision (P1, P7, P8, P9, and P12). P12 understood the outcome of team building well, and has worked towards restructuring so that the staff members also understood the vision. Prior to the restructuring process, P12 identified that staff needed to feel engaged in the process. It was also about "*getting them all on board and feeling like they mattered.*" P12 summed this up in this way:

> *…what we're hoping is, because there's been such a lot of lead up to it that people will really understand when the structure comes out, that they will say "Oh, yes, I know what digital experience is, I know why we're focusing on content over collections; I know what a different service model might look like and why we might need to move that way".*

This theme was emphasised by P1, who reiterated how the library staff work together to produce outcomes. P7, P8 and P9 also stressed the importance of libraries working together and how working together rather than alone produces better outcomes.

5.6.7 Goal: Property 4F: Building a Creative Culture

Some of the participants remarked upon creativity in a number of ways (P1, P5, P8, P9, and P12). P12 tried to get creative ideas for the library from students as part of the restructuring project. P1 also used the creative ideas of students in reimagining the library service. P9 appreciated the creativity of staff in coping with smaller staff numbers. P5 noted that the library communicated with students on

social media in a "*quirky and creative*" way. P8 emphasised the importance of creativity in creating a new visual identity for the library:

> *...we've had feedback from a senior academic, saying "Why is the Library the only cool looking place in the whole university. We're a school of [XXXX]. We don't look that cool." That's really nice feedback to get. There's that culture – that we understand design.*

5.6.8 Summary of Participants' Multiple Perspectives

P7 and P9 focused on the strategy of future-proofing the library (Property 4B). In Property 4C: Building a customer focus, participants from all university types conveyed a strong interest in providing a customer-focused culture. The data shows, as illustrated in Table 5.5, that the University Librarians of the Go8 libraries spoke least about developing a learning culture, while P1 and P4 discussed learning culture the most (Property 4D: Building a learning culture).

Table 5.5

The Response of Participants: Category 4: Building an Agile and Engaged Culture

PROPERTIES	USSU	ATN	IRU	RUN	Go8
4A: The problem: Culture of complacency			*University libraries - culture of complacency (P3, P7) *Staff reluctance to change (P7)	*University libraries - culture of complacency (P4) *Staff reluctance to change (P4,P12)	
4B: Strategy: Future-proofing the workforce	*Agile and resilient workforce (P1)		*Workforce to possess capabilities for relevance (P10)		
4B: Leading and modelling staff culture	*Modelling collaborative evidence-based decision making (P1)				

PROPERTIES	USSU	ATN	IRU	RUN	Go8
4B: Redirecting staff for strategic alignment with the university	*Directing staffing to pressing needs (P9)	*Less demand for traditional skills (P2) *Business analysts (P2) *Data managers (P2) *Information management specialists (P2) *Project managers (P2) *Staff with specific technical skills (P2)	* Less demand for traditional skills (P7) *Directing staff to research strategy (P10)	*Restructuring for engagement & collaboration (P12)	*Staff reductions where demand is shrinking (P11) *Web managers (P5) *New areas of growth (P11)
4B: Workforce & succession planning: Workforce management	*Workforce management (P1)	*Succession & workforce planning (P2) *Workforce management (P2)	*Workforce planning (P3) *Workforce management (P3)		*Succession & workforce planning (P6) *Workforce management (P6)
4B: Skills	*Management with superior dialogue and reflection skills (P1)	*Attracting & retaining staff with skills for 21st century (P2	*Attracting & retaining staff with skills for 21st century (P7)		*Attracting & retaining staff with 21st century skills(P5, P6)
4B: Behaviours	*Reacting to challenges through collaborative problem solving (P1)	*Management who will take heavy workloads (P2)	*Appropriate behaviours (P7) *Leadership capability to direct new services (P7, P10)		
4B: Future-proofing jobs	*Individual performance plans (P1)		*Rewriting role descriptions (P7) *Staff skills & knowledge audit (P3)		
4C: Goal: Building a customer focus	*Customer focused service (P1) *Staff can naturally collaborate (P1)	*Customer focused service (P2, P8) *Ensuring staff are networking with stakeholders (P8) *Gregarious culture (P8)	*Customer focused service (P3, P7, P10) *Recruiting staff with an outward looking focus (P7)	*Customer focused service (P4, P12) *Restructure focus on collaboration & engagement (P12)	*Customer focused service (P5,P11) *Partnering librarians/ library with faculties (P5, P6)

PROPERTIES	USSU	ATN	IRU	RUN	Go8
4D: Goal: Building a learning culture Leaders as models	*Leader learns from others (P1) *Leader is part of learning community (P1) *Modelling learning to staff (P1)	*Leader learns from others (P2) *Learning from other libraries (P8)	*Importance of CAUL & other libraries (P3, P7, P10)	*Importance of CAUL & other libraries (P4)	*Importance of CAUL (P5, P6)
4D: Staff learning	*Learning is holistic (P1)	*Importance of professional development (P2)	*Importance of professional development (P10) *Looking for learning capability P7)	*Importance of professional development (P4) *Benefits in multiskilling staff (P4)	*Importance of professional development (P6)
4D: Types of learning: Formal	*Learning infrastructure (P1) *International staff exchanges (P1) *Monthly learning café/tea/Unit forums (P1)	*Workshops (P8) *Conference attendance (P2) *Conducting research (P2, P8) *Systematic reviews of systems & services (P2)	*Writing papers for conferences (P3)	* Workshops (P12) *Attending professional development events (P4) *Systematic reviews of systems & services(P4)	*Conducting research (P5) *Systematic reviews of systems & services (P6, P11)
4D: Informal learning: Experiment	*Testing systems, products, services (P1) Library as lab (P1)	*Testing systems, products, services (P2)	*Testing systems, products, services (P7, P10)	*Testing systems, products, services (P4)	
4D: Collaboration on projects	*Collaborative learning (P1)	*Collaborative partnerships with faculties, researchers, interns, other libraries (P2, P8)	*Collaborative projects with faculty and researchers (P10)	*Allowing staff to collaborate on projects (P12)	
4D: Other forms of learning	*Problem solving (P1) *Learning by doing (P1)	*Learning through play (P8) *Mistakes as a learning experience (P8)			
4D: Reflection	*Reflecting (P1)	*Reflecting (P8)	*Reflecting (P3, P10)		
4E: Goal: Building team culture: Empowering staff	*Allow staff to be creative (P9) *Give credit to staff (P9)	*Trust staff to do their jobs without close supervision (P8)	*Allow staff to show initiative (P7) *Exercise leadership (P7)	*Empowering staff to write and analyse their role descriptions (P12)	

PROPERTIES	USSU	ATN	IRU	RUN	Go8
4E: Egalitarian approach to reporting structures	*Wary of hierarchical language (P1)	*Less rigid or hierarchical (P8)	*All staff members on project teams (P10) *All staff may need to lead projects (P7)	*All staff involved in environmental scan (P12)	
4E: Communicate openly with staff	*Publishing agendas and minutes on internet (P1) *Communication systems design (P1) *Team meeting culture (P1, P9)	*Informing staff about developments in university and sector (P8)	*Library goals published on website (P10) *Collegiate sharing of information during restructure (P7)	*Open two-way communication with Director and Vice-Chancellor (P4) * Lengthy consultation & communication with staff during restructure(P12	*Lengthy consultation and communication with staff/trade unions during restructure (P11)
4E: Encouraging collaboration amongst staff	*Collaborative staff culture (P1) *Staff naturally collaborate (P1)		*Joint decision making (P7) *Staff encouraged to communicate ideas (P7)	*Staff encouraged to communicate ideas (P12)	
4E: Working towards a common vision	*Library staff working together to produce outcomes (P1, P9)	*Library staff working together to produce better outcomes (P8)	*Library staff working together to produce better outcomes (P7)	*Ensuring staff understand the vision of the future library (P12)	
4F: Building a creative culture	*Creativity in reimagining library (P1) *Creative ways in dealing with challenges (P9)	*Creating a visual identity for library (P8)		*Creativity in reimagining library (P12)	*Creative communication with students (P5)

5.7 CATEGORY 5: DEMONSTRATING THE LIBRARY'S VALUE

The category of *Demonstrating the library's value* derived from an in vivo phrase that represents a strategy that was important for all participants, and most participants devoted significant time speaking about how they demonstrate the library's value. Participants P2, P3 and P7 devoted between 35 and 40 percent of interview coverage to this topic. Other phrases used by participants included "*constantly proving value*", "*demonstrating relevance*" or "*persuading*" or "*arguing*" the library's value. This was regarded as a very important strategy because the library must vie with other departments for funding (P3, P5, and P7). P7 alluded to this:

> *People still love the library and they tell me that, but I often wonder: if it was their budget or my budget, what would it come down to?* (P7, interview 1)

P4 stated that demonstrating value was at the forefront of most University Librarians' thinking (P4):

> *I think maintaining and demonstrating your relevance particularly to our university community is becoming something at the forefront of most university libraries and librarians at this point.* (P4)

Some of the participants' displayed a preference for the word "*value*" over the term "*relevance*" during the interviews. This suggested that the phrase "*maintaining relevance*" was possibly more conservative and passive, involving the library arguing for its own existence. The participants' preference for the word "*value*" suggests that academic libraries have moved beyond this passive attitude into a more dynamic and proactive mode. Libraries now demonstrate their value, and find ways to strengthen their valued status. The term "*value*" refers to something that is tangible and therefore, in trying to demonstrate value, librarians are trying to put forward arguments that use tangible measures.

A number of University Librarians emphasised the constant and continuous nature of demonstrating value (P1, P3, P4, P5, P7, P8, and P9), and P4 summed this up well:

> *I think there is a growing consciousness in the sector that we need to be constantly proving our value, or demonstrating our value, for want of a*

better word and of course showing how relevant we still are in this current environment. (P4)

5.7.1 The Process of Demonstrating the Library's Value

The process of demonstrating the library's value consists of the following phases: the problem of struggling to demonstrate the library's value (Property A); the strategy of using evidence-based measurements of value (Property B); the techniques of demonstrating the library's value (Property C), articulating the library's value (Property D) and engaging with stakeholders and promoting the library (Property E); and the goal of achieving measures of success (Property F). The technique of Property D and the cultural strategy of Property E occur concurrently. The technique of Property D, along with the strategy of Property B belong to Glaser's *strategy* coding family (Glaser, 1978, p. 76). The cultural strategy (Property E) belongs to Glaser's *cultural* coding family (Glaser, 1978, p. 77). These strategies and techniques enable the goal of Property F: Achieving measures of success, which belongs to Glaser's *means-goal* coding family (Glaser, 1978, p. 77).

This process is illustrated below in Figure 5.5, as a sequential order, with the arrows signifying the linear processual action (Saldaña, 2013, p. 251). The sequential relationship from Property A to properties B,C, and F falls within Glaser's temporal ordering theoretical coding family (Glaser, 1978, p. 78). Articulating the library's value (Property D) and Property E: Engaged culture are subsets of demonstrating the library's value (Property C) (Saldaña, 2013, p. 251). According to Glaser's theoretical coding, these Properties are *dimensions* of Property C (Glaser, 1978, p. 75).

To summarise this process, the struggle to demonstrate the library's value (Property A) can be solved by demonstration of the library's value (Property C), which is done by engaging with stakeholders and promoting the library (Property E) and articulating the library's value to university administrators (Property D) using evidence-based measurements of value (Property B). The measurement of success (Property F) allows the library to ascertain whether further realignment is required.

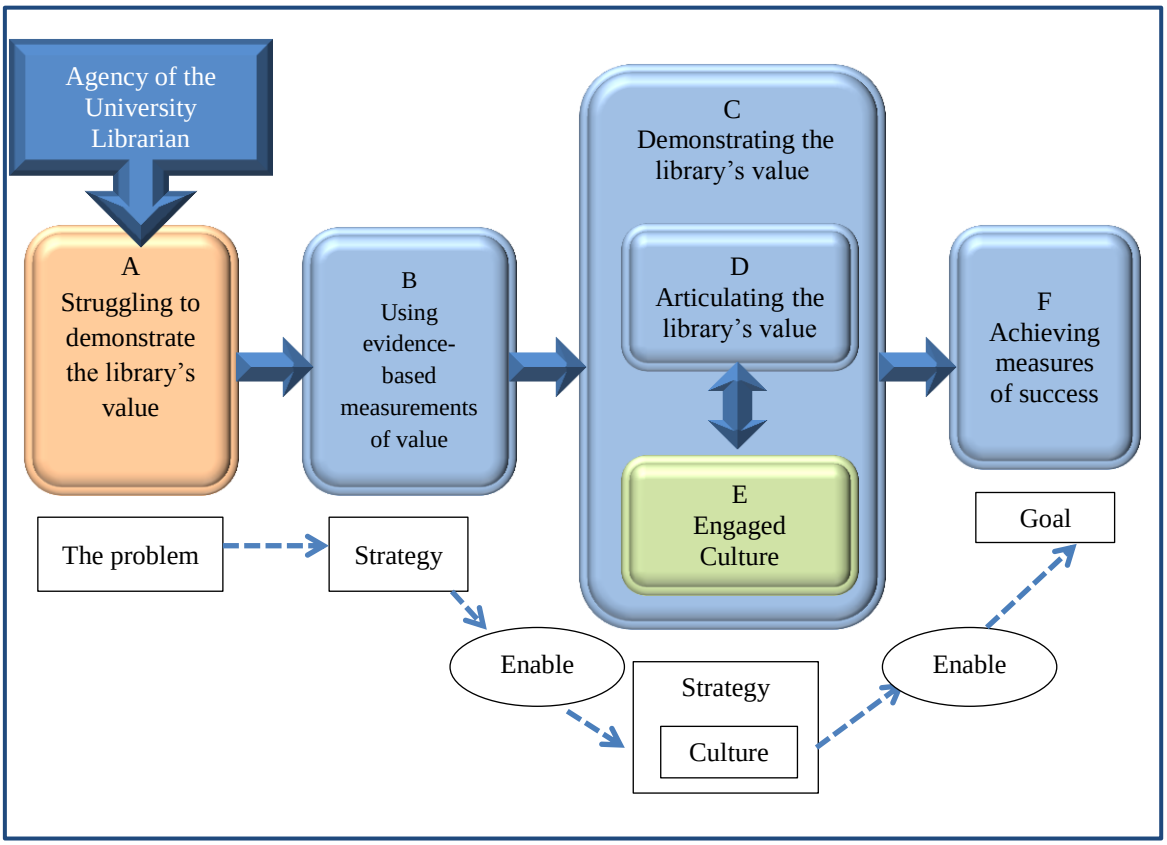

Figure 5.5. The process of demonstrating the library's value.

5.7.2 The Problem: Property 5A: Struggling to Demonstrate the Library's Value

The problem of struggling to demonstrate the library's value relates to the university librarians' constant challenge of demonstrating the library's value to stakeholders. This property emerged as a challenge that most participants said they faced (P1, P2, P3, P4, P5, P6, P7, P8, P9 and P11). There was a sense of frustration about the perceptions of the university and wider community concerning the library's services, its functions, and the amount of work that goes into providing an efficient, relevant and excellent service and P8 was most vociferous in expressing this:

> *For me, personally, it hurts a bit that that role is not fully appreciated within the university. Libraries are pretty reliable service providers in general and we are really trying very, very hard to stay on top of the challenges presented by new technologies, and in many ways, by the university catching up with where the internet is, which we've been at for some time.* (P8)

The University Librarians stated that they face the following problems in demonstrating the library's value:

- Fighting outdated perceptions and ignorance about library

- Struggling to achieve valued status
- Struggling with measurements of value
- Struggling to gain budget funding

Fighting Outdated Perceptions and Ignorance about the Library

Many of the participants expressed frustration that they were fighting outdated and ignorant perceptions about the functions of the library (P3, P4, P5, P6, P7 and P8). P6 of Go8-2 spoke with some vexation that university libraries were dealing with a general attitude that libraries are about printed books. P4 also mentioned that some other University Librarians have to struggle with this perception. Some of the participants also communicated that they struggled with lack of awareness about the role of the library in the university (P5), or of the excellence of library performance (P8).

Some of the University Librarians in the sample also indicated that they struggle with the ignorant views of the wider community (P3, P4). This problem was compounded by perceptions from a wider community which questions the value of the library on the modern campus, as P3 observed:

> *And also too, just in the last year or so, there's I'll say a misconception that libraries aren't core to the research and learning mission of the university. And that's often coming from external commentators.* (P3)

Struggling to Achieve Valued Status

More importantly, some of the participants articulate their struggle to achieve a valued status with administrators responsible for finance. P3 expressed frustration with the view that libraries are able to cope with budget cuts:

> *That's both a curse and a blessing for us, because, sometimes, as we all know, the squeaky wheel gets the grease. So, managing that is an interesting world for us to have, because you don't want to be forgotten. You don't want people to think, "Oh well, we can slash their budget yet again by two percent and they'll cope.* (P3)

P7 agreed with this:

> *That adding value is so important because the question will always be asked "We're spending an awful lot of money on the library"; and particularly on*

> *the collections, and people see that as a lump sum, and it is a sizeable lump sum, that may well be able to be spent elsewhere.* (P7, interview 1)

Struggling with Measurements of Value

Many of the participants expressed their struggle with the current measurements used to try to persuade administrators of the value of the library (P2, P4, P6, P7, P8, and P11).

For P11, having key performance indicators (KPIs) that measure success is difficult:

> *Our KPI's have traditionally been around counting things like the number of information literacy sessions we deliver or number of questions we answer. It's hard to actually connect those to positive outcomes for students. Something I think as a sector we struggle with.* (P11)

Participants also commented upon the difficulties with the use of benchmarking tools in articulating value to administrators (P2). Some of the participants acknowledged that it was difficult to measure relevance because, according to P8 "*…it's about understanding the perspective of others, and it's something we don't appreciate very well".* Moreover, P2 mentioned the questions the University Library peak body, CAUL, has with survey methods, and both P2 and P8 (ATN universities) were aware of the disadvantages of survey methods, in that they sometimes return unrepresentative and dishonest data.

Struggling to Gain Budget Funding

Finally, many of the participants shared that they struggle to gain funding for the library (P2, P3, P5, P6, P7, and P9). P7 said that in universities money is never easy to come by. P5 mentioned that in Go8-1 University, power resides in the hands of deans, who bring in the money, and are reluctant to disperse funding to other areas:

> *[This university] is quite devolved in terms of financial power and control. The Deans are very, very powerful because they bring the revenue in and they are basically allowed to keep it as an incentive for them to bring more revenue in* (P5)

P3 was emphatic that obtaining funding is the biggest challenge for IRU-1 library:

> *Right now, probably because it's the beginning of the academic year and we're doing budgets and things like that, but it's been this way for many years. Money! Money is the biggest challenge I face; both to simply fund our core business, but also to fund innovation.* (P3)

5.7.3 Strategy: Property 5B: Using Evidence-Based Measurements of Value

The property of using evidence-based measurements of value encompasses the range of ways libraries can measure their value. P7 stated that measuring value is important and P3 remarked that *"using data effectively is a very powerful thing for libraries too".*

The reason for its importance, according to P4 is:

> *...it is very easy to fall into the trap of knowing, of deciding that you know what they want, so therefore you'll give it to them. That can be quite dangerous because sometimes what you think they want is not necessarily what they want.* (P4)

While, according to P3 and P6, libraries have traditionally been very good in using statistical measurements, most of the participants emphasised a more holistic approach to measurement. Some of the participants highlighted the importance of giving all feedback a critical and analytical framework (P3, P4, and P8). P3 stressed comparing university-wide feedback with that of the library, correlating the data, and then making assessments.

Therefore, according to the evidence gathered from the participants, there are three ways of measuring library value (P1, P2, P3, P4, P5, P6, P7, P8, P9, P10, and P11):

- Quantitative measurements
- Qualitative measurements
- Comparison with other institutions through benchmarking instruments

Quantitative Measurements

Quantitative measurements consist primarily of survey instruments such as Insync™, Ithaca™ or Libqual™. These are surveys of staff and students about library services. They are taken very seriously by a majority of the University Librarians interviewed (P2, P3, P5, P6, P7, and P9). However, some participants

questioned the reliability of the data they produced (P2, P8), as stated in Property 5A. P10 also mentioned the use of statistics for measuring and evaluating service requests from researchers.

The University Librarians in this research also reported that they are making use of the universities' business analytics systems. Business analytics systems allow the library to assess the impact of the library on, for example, student achievement. These were assessed as important as they allowed the library to produce reports on their impact on various university strategies such as teaching and learning, research, or student outcomes (P2, P3). P11 also had plans for a university business analytics system:

> *A number of our objectives are around putting in place better systems so that in future we'll have data that can actually feed into or connect with other university systems that capture data about what students are doing and demonstrate that the library's contributing – providing actual evidence that we're contributing to the success of the university's teaching and learning missions, research missions, etc.* (P11)

Qualitative Measurements

Qualitative measurements allow University Librarians to explore the details of stakeholder needs, rather than analysing overall trends. Qualitative measurements that were used by the research participants included: focus groups, monitoring complaints, and most importantly anecdotal feedback. Focus groups were mentioned by at least four participants (P3, P5, P7, and P12). P2 placed emphasis upon complaints, stressing that they were so rare, that if they are made, the library moves to take action. Anecdotal feedback was given credence by many participants (P3, P7, P8, and P11). P7 remarked upon receiving much anecdotal feedback at a personal level. P3 noted the importance of individual feedback as it also has the power to give library staff "*some assurance that we are meeting some of the needs of, not only corporate needs but individual needs. That can be very powerful, moving for staff too"*.

P8 also gave credence to this sort of feedback simply because it was often spontaneous and unforced:

> *I know that's working because I get spontaneous feedback from Deans and Heads of school about some of the librarians they're meeting. Some of*

> *whom, they don't know their name, but they're going "Oh, that really cool librarian, she's just the best thing since sliced bread, and they have to describe her to me. They can't remember her name, but they say, everyone in our school or faculty loves her, and she's always here doing things, running workshops.*

P7 accepted the authority of qualitative feedback, and therefore has been motivated to initiate the library's own qualitative research:

> *The one thing that we're going to do that I think is important to look at what other factors there might be. We're actually working on something called "Library stories", and that's where we go out and actively collect stories of peoples' perceptions of the library. We're hoping that some of that will give us more insight into how we might be able to measure success; how we might be able to look at indicators for success through the sort of stories that we collect, because it will tell us what people find important to them. And then we might be able to develop measurement around that.* (P7, interview 2)

Comparison with other Institutions through Benchmarking Instruments

The Australian research participants indicated that they also measured their value to the institution by making comparisons with Australian and overseas institutions. The Australian participants revealed that they used benchmarking instruments such as Uniforum as a way of measuring library value and impact (P2). This system allowed them to benchmark the library's efficiency against other libraries. Several librarians emphasised this was a valuable way of assessing how the library is assisting student outcomes and research outputs, and how the library compares with others in Australia (P2, P3, and P4). However, there were some concerns about the value of benchmarking exercises in arguing the value of the library to administrators. There was acknowledgement that some librarians struggled with using benchmarking to persuade administrators of their value (P2).

Other libraries were more concerned with the global rankings of the university, and strove to ensure the library was contributing and competing globally (P2, P5, and P10). According to P10, these are important because they capture the attention of the Vice Chancellor. P10 commented that institutional repository rankings such as Webometrics™ helped to leverage the importance of the library's contribution to the university's visibility. P2 was also aware of the importance of repository rankings

and was particularly conscious of the world class nature of the library facilities, feeling a responsibility to promote the library.

5.7.4 Technique: Property 5C: Demonstrating the Library's Value

Demonstrating the library's value is about giving a public demonstration of the library's value (P4, P6, P7, P8, and P10). It also involves promoting the library and its services (P2, P5). According to P6 "s*ometimes, producing documents and having plans isn't enough. It's actually the demonstration and communication of what we're actually achieving"*.

P10 stated that libraries have not been good at demonstrating their value. This view was supported by P8, who claimed that librarians have never been good at promoting themselves.

The university library demonstrates its value to the university by:

- Gaining political support within the university
- Developing a good reputation
- Demonstrating leadership within the university
- Establishing high visibility

Gaining Political Support within the University

Political support is achieved firstly, by understanding the university governance structure and the way decisions are made (P1, P10), as P10 remarked *"we need to be much more externally focused in terms of why we are here; where do we fit into the institutional ecosystem".*

P5 understands that power resides in Deans who are given control over their funding. Therefore for P5, gaining support by collaborating with the Deans is important, and therefore, *"it's constantly keeping the value proposition about the library current for them"*.

P2 used terms such as "*advocacy*" and "*positioning*" and phrases such as "*planning about making proposals*". When aiming for administrative support for a refurbishment, for example, P2 stated that *"it's also about gaining political support within the university that that's also a good thing"*. Therefore, P2 alluded to *"strategic meetings and strategic walk arounds with the Vice Chancellor that have*

enabled parts of the libraries to get refurbished". P1 emphasised systematic communication with leaders.

A supportive administration was an extremely important factor for participants. Only a few of the participants expressed their good fortune in having a supportive senior administration (P2, P4). P4 stated:

> *In terms of relevance to our stakeholders and value to the organisation that I touched on earlier, I think once again, we are fairly fortunate here in that our executive is, I believe, very aware of our value to the organisation, so they are quite, for want of a better word, pro library.*

P2 suggested that much of the library's support was due to the presence of former University Librarians on the University Executive:

> *We also have been lucky in that the last two Deputy Vice Chancellor TILS have been librarians and have been the University Librarian previously and so both (name) and (name) were the University Librarian before they became the Deputy Vice Chancellor. So for the last fifteen years we have actually had a Librarian at the seat of the table of the Vice Chancellor's advisory committee inadvertently.*

Moreover, P2 alluded that the good reputation of the library existed because of the work of previous University Librarians.

Participants also claimed the importance of the advocacy of their immediate superior (P4, P5), and P4 emphasised the open and two-way communication that exists between the university executive and lower levels:

> *Sometimes we will become aware of a challenge, and, then we, through our director, will take it up to executive, if there's something that's concerning us, for example, or something we become aware of, that hasn't come from the top down, sometimes it will go from the bottom up. And they're responsive to that, which is good. I think the university, and it's been working really hard on this, particularly in the last few years, is very open communication. There's been a really concerted effort to keep people informed and to have a two way channel of communication.*

Developing a Good Reputation within the University

Developing a good reputation for the library within the university was regarded by the participants as very important (P2, P3, P4, P5, P7, P8, P9, P10, and P12). P8 stated this, although he used the phrase "*developing an identity*":

> *We've developed an identity there that models what we say we want to do within the university within the library itself.*

Some of the participants claimed that their universities invest a high level of trust in their libraries (P2, P7, P8, P10, and P12). Libraries have developed trust by delivering high quality services, delivering on projects and programs, and excelling in core business (P2, P3, P4, P5, P7, and P8). Libraries have also developed trust by delivering services that create efficiencies or the most impact for the university (P1, P3, P8 and P10). P8 claimed that the library is regarded as trustworthy because it has a reputation for being open and honest about its failures as well as its successes.

Many of the participants expressed pride in the library's reputation for their "*high trust factor*" (P2) or the high regard with which they are held by the university administration:

> *We are very highly regarded for what we are now doing and the way that we collaborate with the research services unit as well.* (P10)

> *…that sort of set a good example and we went from there and people have invited us.* (P8)

Some participants (P2, P3, and P10) acknowledge the importance of impressing the Vice Chancellor. P12 observed that the library's good reputation enabled it to gain the Vice-Chancellor's support in initiating a restructure:

> *That gave us something to go to the Vice-Chancellor with and say "Actually, this is not what a university library should be. We want to change".*

Some university libraries have developed the trust of the administration by faithfully demonstrating that they are serving the university's goals. This has been done in many libraries by volunteering to take on roles that other parts of the university are unwilling to do (P2, P3, and P7). Some of the participants claimed an intentional strategy of "*actively getting out there and making a name for ourselves in areas*" (P8), delivering on programs (P2), putting up hands to do things (P7), and setting a good example (P8).

Demonstrating Leadership within the University

A number of the participants expressed that in addition to developing a good reputation within the university, the library was demonstrating its value to the university by exercising leadership (P2, P3, P5, P7, P8, P9, and P10). This leadership was noted by P2 and P8:

> *So the Vice Chancellor, I guess, is very pleased that we are leading in a range of areas.* (P2)

> *We've led the university landscape in that and others have followed what we've been doing.* (P8)

Perhaps the most important way to demonstrate leadership is in being proactive, rather than being reactive in response to situations. Proactive behaviour was emphasised by P4, P5, P8, and P10. Proactive behaviour includes an intentional strategy of embedding the library, or linking the library into university initiatives (P2, P7, P8, and P9). The participants claimed the importance of demonstrating the contribution to university strategy:

> *We also look at value in terms of what we contribute to, again, the strategies of the university.* (P7, interview 1)

> *The other aspect of that is making sure we demonstrate our library services and collections as they contribute to the university strategic priority.* (P9)

Some of the contributions to university strategy have been discussed in 6.2.4, but the participants also stressed their contribution to the university's profile (P7, P8). P8 stated that it is *"also in what we add to the university's image profile and generally the university's environment".*

Examples of university library contributions to the university profile included playing an important role in new initiatives such as the institutional repository (P2, P8). Leadership activity also manifested in examples of chairing university wide committees (P3, P7), or in taking active roles in university committees such as curriculum standards or student success and retention (P2, P4). P8 gave an example of the library partnering in design thinking workshops, which then led to the development of further programs. P8's library also contributed to the university and wider community by providing curated exhibitions and running events. P2 and P4

indicated that they contributed to the university profile by providing programs for local schools.

Another example of leadership is in the way the University Librarians set an example to the university community. P8 stressed intentionally setting a good example to the university community, while P3 noted how the library's strategies have been taken on board by other parts of the university. The library is able to do this because of its unique position as a central service (P2, P5, and P7). Instances where the library has set an example for the university to follow include being experimental with services (P8), liaising and outreaching around the university (P3), engaging, collaborating and partnering with other departments and faculties (P5), and strategically using the central role of the library along with its networks (P8).

Establishing High Visibility within the University

Some participants expressed the necessity of raising the visibility of the library within the university (P5, P6, and P8). This requires the University Librarian to attend and be seen at strategic events (P5). P5 and P6 talked about being flexible and creative in the use of library space in order to raise the profile of the library. P8 intentionally used the library as a cultural hub to provide curated showcases of cultural resources being produced by the university. This is similar to P5's use of art gallery space and showcasing curated art collections around the state.

An active online presence, particularly in social media is also an important way for the library to have high visibility (P3, P5, and P8). P8 talked about developing a visual identity or branding, and also used social media to communicate online:

> *Our online activities are seen as very important – to be engaged with, not just students, but also with management and faculties.*

P5 also encouraged staff to network. P5 indicated that Go8-1 library had previously had the resources to employ a marketing manager (P5), while others recognised the importance of word of mouth (P8).

5.7.5 Technique: Property 5D: Articulating the Library's Value

Property 5D: Articulating the library's value entails the verbal and written communication of the library's value to the university and its stakeholders. The majority of participants expressed the need to articulate the library's value (P1, P2,

P3, P5, P7, P8, P9, and P10). This was enacted by the participants in the following ways:

- Reporting to stakeholders
- Developing persuasive arguments for university administrators
- Encouraging the university to adopt library goals

Reporting to Stakeholders

The participants indicated that reporting to stakeholders was an important activity, as stated by P3:

> *I think libraries have always been somewhat the leaders in universities in closing the feedback loop when they do feedback with customers.*

Feedback was done in various ways (P2, P3, and P5). Therefore, P2, P3 and P5 noted that they always reported back to students and staff on the outcome of survey or focus group activity. P5 stated that *"we always feed back to them. Basically, 'you've told us X and we have done Y', to respond to that"*.

Reporting to university administrators was emphasised by a number of participants (P2, P3, P7, P8, P9, P10, P11, and P12). However, participants acknowledged that reporting back to university administrators was difficult (P2, P7, and P8). The extent of this problem was implied by the involvement of the University Librarians' peak body, CAUL, in developing guiding principles for reporting value to university administrators, as noted by P7:

> *CAUL, the Council of Australian University Librarians is actually at the moment trying to develop principles of threshold standards for Australian University Libraries. So at least we'll have some principles which will guide how we report our value and therefore our relevance.*

P9 spoke about reporting back to the university on strategic plan items that had been actioned, and mentioning the progress of certain actions:

> *We report on action items where we've been successful. We provide that information to the university as well.*

P3 argued the benefits of the university business analytics package in reporting the impact of the library to university administrators by stating *"we can use that data*

to help look at the value and the impact that the library has" (P3). P11 indicated that future reporting at Go8-3 may involve the use of the university business analytics.

Some participants observed that the problems in reporting to administrators included the usage of statistics (P2, P7, and P8). For example, counting visits to the library may be unsuitable because students may be visiting the coffee shop, the feedback may be inappropriate, or the feedback may not be honest because students can simply be feeling negative on that particular day (P7 and P8). P7 also reported that surveys do not always explain changing usage - falling loans of print books, but rising e-book usage. These problems are also explained in Property 3C: Engaging internally within the university.

Developing Persuasive Arguments for Administrators

Related to the problems of reporting to administrators, the participants in this study emphasised the importance of developing arguments that will persuade university administrators of the value of the library. Persuasive arguments can only have impact when couched in the particular language of the university's senior administration (P1, P3, P9, and P10), as stated below:

> *It also means that we need to use terminology so that when we talk about library instruction we really need to talk about student success and retention because those are university priorities and that is the language that the university uses.* (P9)

> *So we've had to become very familiar with the strategic language of the institution.* (P10)

The importance of this was demonstrated by P1 who was asking senior administrators to show the library how it can communicate with them:

> *…in the case of the community college, we are meeting with the president, the provost, and five deans, to ask them how we should communicate with that organisation about budget, collections, services and technologies* (P1, interview 1)

Some participants asserted the importance of communicating how the library contributes to university strategy (P7, P8, P9, and P10), and P10 emphasised "w*e work very hard to show and demonstrate our alignment to the institutional objectives"* (P10).

P1 and P3 remarked on the value of using impact statements which link the impact of the library on university strategic outcomes. Some of the University Librarians reported on their contribution to university strategy by pointing to tangible results as arguments for their value and impact. For example, they linked survey results to student retention (P7), student success (P9), or even the success of the state (P9). P7 talked about explaining the narrative around the usage of library resources, and contextualizing it in ways readers will understand:

> *And we have to particularly put them in context as some of those figures are changing. So, for example, our loans have dropped by 20 percent over the last few years. However, the usage of "e' has increased more than twenty percent. So, to me it's about telling the narrative around those figures.* (P7, interview 1)

Participants identified the importance of tangible results in demonstrating how the library contributes to the acquisition of more government funding. For example, the library can argue its contribution to the university's research outcomes. Tangible results include the library's contribution to publication outputs (HERDC) and publication impact (P10). P7 and P10 talked about reporting back to the university on contribution to university outputs:

> *So now we have some way of showing our value through our contribution, and we can say that ... We're looking for a good news story every year that we run it. This year it's that we've collected more outputs. Now we don't produce the outputs. So we're very much dependent on the academics. So we can't necessarily rely on that metric every year. But it may be that we shorten the time for collection.* (P7, interview 1)

Libraries also referred to the statistics they collect about their engagement with the researcher community (P7, P10). P8 also pointed to the outcomes of collaborations with various university departments and faculties.

Encouraging the University to Adopt Library Goals

Finally, P9 stressed the importance of encouraging the university to adopt the library's goals so that the university will work for library goals as well. An example of the way this has worked is in P5's library, Go8-1. The library's expertise in engaging with stakeholders was being recognised by the university. Therefore, P5

reported to the Vice Principal for Engagement, and was involved in preparing the university's engagement strategy:

> *This university, actually, it's sort of interesting, because of your topic and whatever, this university actually has engagement as an important strand of our strategy and that's why, now, I'm physically reporting to the Vice Principal, Engagement.*

5.7.6 Culture: Property 5E: Engaged Culture

Through engagement with stakeholders, the library is able to promote its services and therefore demonstrate its value. A culture that engages with stakeholders is necessary with the focus here being upon promotion of the library and its services. Much of the detail has been explained in section 5.6.4, although the data summary appears in Table 5.6 below.

5.7.7 Goal: Property 5F: Achieving Measures of Success

Some of the University Librarians participating in this study claimed success in demonstrating and articulating the library's value. They claimed success in four ways:

- Meeting key performance indicators
- Gaining adequate budget funding
- Attaining the high regard of university stakeholders
- Library goals becoming the university's goals

Meeting Key Performance Indicators

A number of participants mentioned the importance of meeting the key performance indicators (KPIs) that are part of strategic planning and measure the success of the strategy in achieving goals (P3, P4, P6, P7, P10, and P11). For example, P3 stated:

> *Well, meeting the KPIs that we set is a good way for us to check and to make sure that when we set our goals, how are we going to measure them in the first place. It gives us that benchmark.*

A number of performance indicators that participants regarded as important included demand and usage and return customer statistics (P7), and service request statistics (P10).

In spite of the importance of these performance measures, a number of the participants acknowledged that these are often inadequate in determining success (P6, P11). For example, an area where KPIs were found to be inadequate was in the area of engagement:

That relationship building is, to some extent less easy to measure. We can measure increases in online content or visits to the library, but measuring relationships is much more tricky [sic]. (P6)

Gaining Adequate Budget Funding

According to several participants, budget funding was the most tangible way of measuring the success of the library in maintaining its relevance (P2, P3, P4 and P7). P2 explicitly related budget funding to maintaining relevance. According to P2 *"having that support is a really significant piece of how well the library can be funded and therefore maintain [sic] its relevance, and then of course vice versa"*. P2 and P4 claimed good budget support:

> *The Vice Chancellor, I guess, is very pleased that we are leading in a range of areas, so he doesn't really have cause to have any issues with our funding, for example.* (P2)

> *We've been really well supported in terms of our acquisitions budget*. (P4)

Other librarians complained about a tight budget (P3, P5, P6, P7, and P9), but, as discussed in section 6.3.3, the budget is often due to external factors facing the university, rather than the fault of the library itself.

Attaining the High Regard of University Stakeholders

Because budget funding is not always a reliable way of measuring the library's value to the university, some participants stated that there are other ways of gauging their success (P2, P3, P7, P9, and P10). Some librarians claimed their success through the high regard in which the library was held by university administrators (P2, P10).

How do they know they have the respect of the university administration? P2 stated that ATN-1 library benchmarks as a highly regarded library. P10 claimed that IRU-3 library can gauge its success when it is used as an exemplar in the field, with people "*reaching out*" to them to find out their methods. P7 cited the library's success in earning awards from the Office of Learning and Teaching. P10 asserted

success in being mentioned by the Vice Chancellor in various ways at forums and in annual reports. P12 stated that the success of the library restructure will be gauged through the level of acceptance it receives from the Vice-Chancellor's committee.

Once again, the informal measures through individual feedback were noted by participants (P11, P12), as P11 stated:

> *So, for me, as University Librarian, a lot of the ways that I ensure what we are doing contributes to the university's strategic direction is talking to heads of school, executive deans and senior executive about their perception of library service and the value that they see that we provide, and making sure that they do recognise the value of the library and there aren't particular areas of concern they might have.*

Library Goals Becoming the University's Goals

P9 claimed success when library goals become the goals of the university:

> *So right now we're working on draft university planning. We have the library mentioned on probably four separate goals for the university. That helps the university see it as a university priority – not just a library priority. So if you can invest your time to have the university adopt a library goal as their goal, then that's great. Because then it means they'll work on it as well.*

While it is not explicit in the data, P3 noted how the library influences other areas of the university, for example in the use of Liaison people in other areas of the university:

> *At my university we're currently going through a major restructure and it's been interesting to see how other areas of the university have really adapted an outreach liaison role that the library has had for years. So, areas like the Learning and Teaching Directorate now have Learning Advisers that are adopting the same type of service model that Liaison Librarians have done for many, many years.*

5.7.8 Summary of Participants' Multiple Perspectives

Table 5.5 below illustrates the importance that all libraries placed upon the demonstration of value and that all participants contributed to the discussion about demonstrating their value.

According to the evidence, P2 and P3 contributed the most data about using evidence-based measurements of value (Property 5B: Using evidence-based

measurements of value). The university Librarians from the ATN universities added most detail to Property C: Demonstrating the library's value. The participants that expressed most about articulating the library's value were all participants from the IRU sector and P9.

Table 5.6

The Response of Participants: Category 5: Demonstrating the Library's value

PROPERTIES	USSU	ATN	IRU	RUN	Go8
5A: The problem: Struggling to demonstrate the library's value		*Lack of awareness about library excellence (P8)	*Ignorance of community P3) *Decision makers believe libraries cope with budget cuts (P3, P7)	*Ignorance of wider community (P4)	* Attitude that libraries lend printed books (P6) *Lack of awareness about role of library (P5)
5A: Struggling with measuring value		*Benchmarking tools failing to impress administrators (P2) *Difficulty in understanding perspective of others (P8) *Disadvantages of survey methods (P2,P8)		*Poor questioning leads to poor data (P12)	*Inadequacy of key performance indicators (P11)
5A: Struggling to gain budget funding			*Funding scarcity in universities (P7) *Money is biggest challenge (P3)		*Stretching the dollar to provide services (P5, P6)
5B: Strategy: Measuring value: Evidence-based	*Collaborative evidence-based decision making (P1)	*Critical and analytical framework for feedback (P8)	*Critical and analytical framework for feedback (P3)	*Critical and analytical framework for feedback (P4)	
5B: Measuring value: Quantitative	*Survey instruments(P9) *Quantitative data (P1)	*Survey instruments (P2) *Statistics (P2)	*Survey instruments (P3, P7) *Statistics (P10)		*Survey instruments (P5, P6)

PROPERTIES	USSU	ATN	IRU	RUN	Go8
5B: Measuring value: Qualitative	*Qualitative data (P1)	*Listening to complaints (P2) *Anecdotal feedback (P8)	*University business analytics (P3) *Focus groups (P3, P7)	*Focus groups (P12)	*University business analytics (P11) *Focus groups (P5) *Anecdotal feedback(P11)
5B: Global Comparisons: Benchmarking		* Uniforum Benchmarking (P2)	*Benchmarking (P3)	*Benchmarking (P4)	
5B: Global recognition		*Repository rankings (P2) *Globally recognised facilities (P2)	*Repository rankings (P10)		*Global rankings (P5)
5C: Strategy: Demonstrating the library's value		* Public demonstration of value (P8) *Promoting the library (P2)	*Public demonstration of value (P7, P10)	*Public demonstration of value (P4)	* Public demonstration of value (P6) *Promoting the library(P5)
5C: Gaining political support within the university	*Gaining support of university administrators (P1)	*Gaining support of university administrators (P2)	*Gaining support of university administrators (P10)	*Gaining support of university administrators (P4, P12)	Gaining support of university decision makers (P5)
5C: Knowing university governance structure	*Understanding university governance structure & the way decisions are made (P1)	*Understanding university governance structure & the way decisions are made (P2)		*Understanding university governance structure & the way decisions are made (P10)	*Knowing university governance structure & the way decisions are made (P5)
5C: Strategy for gaining political support	*Systematic communication with leaders (P1)	*Positioning (P2) *Advocacy (P2) *Strategic meetings & "walk arounds" (P2)			*Working with the university deans (P5) *Being seen at important university events(P5)
5C: Supportive high level decision makers		*Former University Librarians on university executive (P2) *Good example of previous University Librarians (P2)		*Pro library university executive (P4) *Advocacy of immediate superior (P4) *Open two-way communication between university executive and library (P4)	*Advocacy of immediate superior (P5)

PROPERTIES	USSU	ATN	IRU	RUN	Go8
5C: Growing reputation within the university		*Developing an identity (P8) *High level of trust (P2)	*Highly regarded (P10) Good reputation (P7	*Doing a good job (P12)	
5C: Making an impression on Vice Chancellor		*Importance of impressing VC (P2)	*Importance of impressing VC (P3, P10)		
5C: Serving university goals by volunteering for roles in the university		* Taking university roles (P2, P8) *Establishing a good reputation (P8) *Program delivery (P2)	*Volunteering for university roles (P7)		
5C: Showing leadership within the university		*Leading in a range of areas (P2, P8) *Proactive behaviour (P8)	*Proactive behaviour (P10)	*Proactive behaviour (P4)	*Proactive behaviour (P5)
5C: Embedding the library into university initiatives	*Embedding the library into university initiatives (P9)	*Embedding library into university initiatives (P2, P8)	*Embedding the library into university initiatives (P7)		
5C: Showing contribution to university profile		*Institutional repository (P2, P8) *Partnering in design thinking workshops/ *Providing curated exhibitions & events (P8) *Local school programs (P2) *University committee work (P2)	*Chairing university wide committees (P3, P7) *Providing curated exhibitions (P10)	*Local school programs (P4) *Participation in university committees (P4)	
5C: Setting an example to the university community		*Setting an example (P8) *Using central role of library & networking (P8) *Experimenting with services (P8)	*University copying liaison role (P3)		*Working with departments and faculties (P5)

PROPERTIES	USSU	ATN	IRU	RUN	Go8
5C: Establishing high visibility within the university		*Using library spaces to raise visibility (P8) *Social media (P8) *Word of mouth (P8)	*Social media (P3)		*Using spaces to raise visibility (P5,P6) *Social media/*Attending university events /*Hiring a marketing manager (P5)
5D: Articulating the library's value: Reporting to Students/staff		*Closing the feedback loop: "You told us X, we have done Y" (P2)	*Closing the feedback loop: "You told us X, we have done Y" (P3)		*Closing the feedback loop: "You told us X, we have done Y" (P5)
5D: Reporting to high level decision makers	*Reporting to university on successful action on strategic goals (P9)	*Reporting to administrators (P2, P8) *Inadequacy of usage statistics (P2, P8)	*Reporting to administrators (P3, P7, P10) *Reporting using university business analytics (P3) *CAUL guidelines for reporting value (P7) *Inadequacy of usage statistics (P7) *Explaining survey results (P7)		*Reporting to decision makers (P11) *Future use of university business analytics (P11)
5D: Developing persuasive arguments for administrators	*Using university's strategic language (P1, P9)		*Using university's strategic language (P3, P10)		
5D: Communicating library contribution to university strategy: Tangible results	*Encouraging the university to adopt the library's goals (P9) *Student success (P9) *Success of state (P9)	*Outcomes of collaborations with researchers etc. (P8).	*Linking surveys to student retention (P7) *Contributing to acquisition of government funding through more publication outputs (P7, P10) *Statistics about engagement with researchers (P7, P10)		*Library goals are the university's goals (P5)

PROPERTIES	USSU	ATN	IRU	RUN	Go8
5E: Engaging with stakeholders and promoting the library	*Staff can naturally collaborate (P1) Responsive, flexible, agile (P1)	*Ensuring staff are networking with stakeholders (P8) *Gregarious culture (P8) *Responsive, flexible, agile (P2, P8) *Promoting the library (P2) *Forging a reputation / *Creating visual identity (P8)	*Recruiting staff with an outward looking focus (P7) * Responsive, flexible, agile (P10) *Promoting the library (P3, P7, P10)	*Restructure focus on collaboration & engagement (P12) *Responsive, nimble, flexible (P4)	*Promoting the library (P5)
5F: Achieving measures of success: Meeting key performance indicators (KPI's)			*Meeting KPI's (P3, P7, P10) *Service request statistics (P10) *Demand and usage statistics (P7)	*Meeting KPI's (P4)	*Meeting KPI's (P6, P11) *Difficulty in measuring relationships (P6, P11)
5F: Gaining adequate budget funding		*Tangible measure of success (P2)	*Tangible measure of success P3,P7	*Tangible measure of success (P4)	
5F: Attaining the high regard of the university's stakeholders		*High regard of administrators (P2) *Benchmarking (P2)	*High regard of administrators (P10) *Used as exemplars (P10) *Earning OLT awards (P7) *Cited by VC in annual reports, speeches (P10)	*Verbal feedback from executive (P12) *Level of acceptance of restructure (P12)	*Verbal feedback from executive (P11)
5F: Library goals become university goals	*University adopts library goals as own (P9)		*Other areas of university adopt library strategies (P3)		

5.8 THE INTEGRATED SUBSTANTIVE GROUNDED THEORY: THE RELATIONSHIPS BETWEEN CATEGORIES AND PROPERTIES

Theory integration brings together all the elements of the substantive grounded theory as an integrated whole. The categories are woven back together and their relationships with each other are specified (Charmaz, 2006, p. 63; 2014, p. 150; Glaser, 1978, p. 72; 1998, p. 163). This section explains and justifies the relationships between the five categories and their properties. As Recker (2013) states this is "how the constructs are related to one another" (p. 48).

The findings suggested that the five main categories related to each other in an overall cyclical process. The cycle included both direct relationships and more complicated mutual and interdependent relationships. This process begins with the library aligning its strategic vision with that of the university (Category 1), and ends with the library then promoting its achievements to the university (Category 5). The processes of continuously reinventing the library (Category 2) and engaging stakeholders (Category 3) lead to the library demonstrating its value to the university. The process then begins again by producing a new or revised strategic plan. The entire process is underpinned by a culture of agility and engagement (Category 4) which ensures the strategies are successful through the active support of library staff.

Figure 5.6 (opposite) provides an illustration of the relationships between each of the categories. On the right-hand side, the overall cyclical nature of the process and the relationships between each of the categories are explained. On the left-hand side are some examples of the supporting data for each relationship.

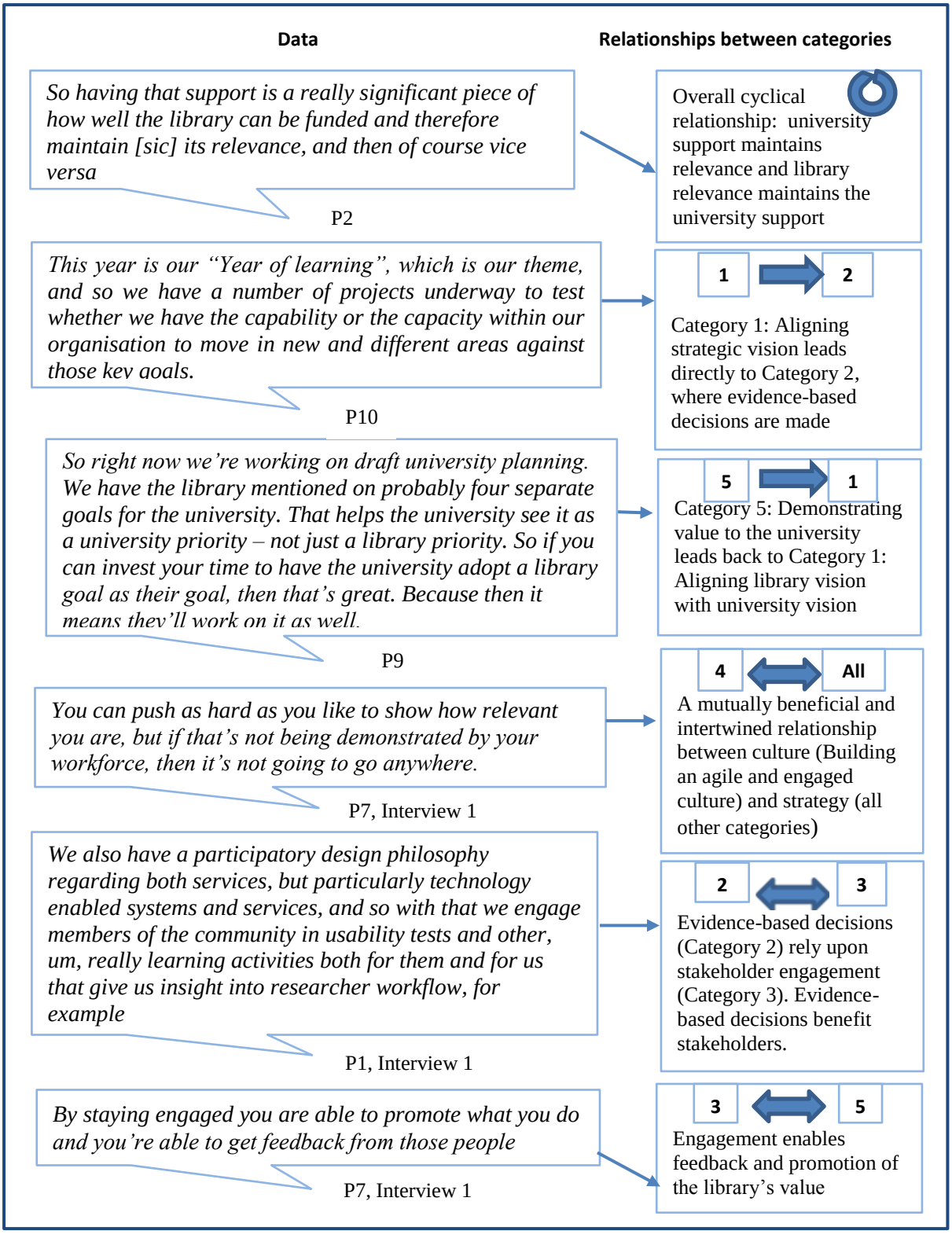

Figure 5.6. How the relationships between categories are supported by the data.

5.8.1 Category 1: Aligning Strategic Vision with the University

Category 1 and 2: direct, one-way

The relationship between Category 1 and Category 2 is simple. Category 1: Aligning strategic vision with the university leads directly to Category 2: Continuously reinventing the library. Once the University Librarian has determined how to support university strategy, and has planned for this support, reinvention of the library can take place.

5.8.2 Category 2: Continuously Reinventing the Library

Category 2: Continuously reinventing the library is the next step in the process after the library aligns its strategy with university strategy. Category 2 has a mutually beneficial inter-relationship with Category 3, and this inter-relationship is supported by the following symbiotic or mutually beneficial relationships between properties:

- Property 2B: Transforming the library and Property 3D: Engaging internally within the university. The transformation of the library requires engagement with internal stakeholders such as faculty and information technology (IT) staff, while internal stakeholders benefit from the improvement of library services.
- Property 2B: Transforming the library and Property 3E: Engaging with external stakeholders. The transformation of the library requires engagement with external stakeholders such as other librarians or peak bodies, while external stakeholders benefit from the improvement of library services.
- 2C: Developing learning and knowledge management infrastructure and 3D: Engaging internally within the university. A learning infrastructure that requires all staff to learn cannot function without engagement with the university's stakeholders. For example, engagement with clients such as students leads to valuable feedback. Conversely, engagement with stakeholders is superfluous if learning has not occurred and solutions are not enacted by the library.
- 2C: Developing learning and knowledge management infrastructure and 3E: Engaging with external stakeholders. A learning infrastructure that requires all staff to learn cannot function without gaining feedback through

engagement with the university's external stakeholders. Conversely, the data gathered from engagement with external stakeholders is superfluous if learning has not occurred and solutions are not enacted.

- 2D: Encouraging an agile culture and Properties 4D: Building a learning culture and 4E: Building team culture. These properties are overlapping because data is present in both categories.
- 2E: Making evidence-based decisions and 3D: Engaging internally within the university. Evidence-based decisions can only be made through the feedback gained by engagement with the university's internal stakeholders. The stakeholders then gain from the improvement of library services.
- 2E: Making evidence-based decisions and 3E: Engaging with external stakeholders. Once again, evidence-based decisions can only be made by gaining feedback from the university's external stakeholders. The external stakeholders such as other libraries then gain from the promotion of the library services.

5.8.3 Category 3: Engaging with Stakeholders

Category 3 has a number of mutually beneficial relationships with other categories. The relationship with Category 2 is explained above in 5.8.2. The relationship with Category 4 is explained in 5.8.4, and the relationship with Category 5 is explained in 5.8.5. It would appear that this category has an important strategic place in this theory because the other categories cannot operate without engagement with stakeholders.

5.8.4 Category 4: Building an Agile and Engaged Culture

Category 4 is closely inter-related with all other categories, and this is illustrated in the presence of a property of culture in the models for each category. An agile and engaged organisational culture is necessary for the library to successfully fulfil its strategies and achieve its goals. The library can only respond to changes in university strategy if an agile and engaged culture exists. Conversely, the constant changes in strategy also strengthen the agility and encourage engagement with stakeholders by ensuring that staff members see change as an opportunity for the library to ensure its valued status.

Category 4 and Category 1: Mutually Beneficial

A mutually beneficial relationship between Category 4 and Category 1: Aligning strategic vision with the university exists because of the following mutual relationships between properties:

- Property 4B: Future-proofing the workforce is inter-related with Property 1C: Thinking strategically to enhance the library's profile. The library is not able to make changes to its strategy if its staff members are not able to cope with change; and similarly, staff members who are able to think strategically will be able to instigate changes. The university library determines how it will support university strategy, and thereby enhances its profile. The library then determines how its workforce skills can help. Conversely, a future-proofed workforce has the ability to quickly change its support strategies.
- Property 4B: Future-proofing the workforce and Property 1E: Planning for an aligned library. The workforce and succession planning of Property 4B are closely inter-related with the planning documents of Property 1E.
- Properties 4C: Building a customer focus and 4F: Building a creative culture, and Property 1D: Thinking creatively, customer focus includes overlapping data.
- Property 4C: Building a customer focus and Property 1B: Responding to changes in university strategy. Having a responsive attitude towards stakeholders enables the library to respond rapidly to changes in university strategy. Conversely, the changes in university strategy make the library more flexible and responsive.
- Property 4E: Building team culture and Property 1E: Planning for an aligned library. A culture where library staff members are working together towards a common vision is important in planning for an aligned library. Moreover, the planning process instils the value of teamwork.

Category 4 and Category 2: Mutually Beneficial

Once again, a mutually beneficial relationship exists between Category 4 and Category 2: Continuously reinventing the library. An agile and engaged culture

allows the library to reinvent itself, while the continuous reinvention maintains the culture of agility and engagement.

- Property 4B: Future-proofing the workforce is inter-related with Property 2B: Transforming the library. The constant review and evaluation of library systems and services takes place because staff members see change as a necessity and as an opportunity for the library. Conversely, the constant change gives the staff the opportunity to update and add to their skill-sets.
- Property 4D: Building a learning culture and Property 2B: Transforming systems. A learning culture means that staff will have the confidence to learn new things, thus being unafraid of changes in systems or technology. Equally, regular systems transformations increase the capacity of staff to learn new things.
- Property 4D: Building a learning culture and Property 2C: Developing learning and knowledge management infrastructure. A learning culture is enabled by a learning infrastructure. The infrastructure embeds learning into the fabric of the workplace. Conversely, the learning of staff can also improve the learning and knowledge management infrastructure itself.
- Properties 4D and 2D: Encouraging an agile culture have overlapping data.
- Property 4D: Building a learning culture and Property 2E: Making evidence-based decisions. The result of a learning culture is that all staff members are able to contribute to evidence-based decisions. Equally, the gathering of evidence enables staff to learn.

Category 4 and Category 3: Mutually Beneficial

The relationship between Category 4 and Category 3: Engaging with stakeholders is also mutually beneficial. Category 4 involves future-proofing the library by building a customer focused culture, a learning culture, a team culture and a creative culture. This means that library staff should have the attitudes that ensure a friendly, open, responsive and collaborative culture that draws stakeholders to engage with the library. The engagement with stakeholders then helps the library to refine and change services according to feedback, and thus become more agile. The

evidence for this relationship is supported by the symbiotic relationships between the following properties:

- Property 4B: Future-proofing the library and Property 3B: Developing an engagement framework. Future proofing strategies include workforce planning, and this relates to developing an engagement framework because the library must consider the type of staffing it requires for its engagement strategies. The two strategic frameworks work together.
- Property 4B: Future-proofing the library and Property 3D: Engaging internally within the university. The strategy of developing an organisational culture of customer-focus, learning, team work and creativity benefits the university stakeholders. At the same time, the engagement with stakeholders helps to develop the library's organisational culture further.
- Property 4B: Future-proofing the library and Property 3E: Engaging with external stakeholders. Like Properties 4B and 3D above, these properties are in a mutually beneficial relationship.
- Property 4C: Building a customer focus overlaps with Property 3C: Encouraging an engaged culture.

Category 4 and Category 5: Mutually Beneficial

The mutually beneficial relationship between Category 4 and Category 5 is supported by the mutually beneficial relationships between the following properties:

- Property 4D: Building a learning culture and Property 5B: Using evidence-based measurements of value. Evidence-based measurements help the library to learn, while learning helps the library to use different types of evidence-gathering.
- Property 4C: Building a customer focus and Property 5C: Demonstrating the library's value. By being responsive to stakeholder needs, the library is able to build the trust of administrators and therefore promote the library's good reputation. The trust of administrators enables the library to take on further responsibility, further enhancing its reputation

- Property 4E: Building team culture and Property 5C: Demonstrating the library's value. The team culture of the library helps to demonstrate the library's value. This often works through the work of the liaison librarians and also through library's presence on university committees and the collaboration with other departments. The library is demonstrating its value, but also promoting the value of team work.

5.8.5 Category 5: Demonstrating Value to the University

Category 5 and Category 1: Direct, One-way

Category 5: Demonstrating value to the university leads directly to Category 1: Aligning strategic vision with the university. The library can promote itself to the university administration and also influence university strategy. The library's success in achieving its goals of relevance and then demonstrating them can encourage the university itself to adopt the library's goals, thereby including the library as part of its goal setting. This relationship is supported by the direct relationships between the following properties:

- Property 5C: Demonstrating the library's value and Property 1C: Thinking strategically to enhance the library's profile. By demonstrating its value to the university, the library is able to promote itself as a big contributor to university goals.
- Property 5D: Articulating the library's value and Property 1E: Planning for an aligned library. The library reports back to university administrators about its progress in meeting KPIs. The performance indicators then influence both the university and the library's subsequent planning process.
- Property 5E: Achieving success and Property 1C: Thinking strategically to enhance the library's profile. The goals of the library support the university and the library's success is noticed by the university. The university then adopts the goals of the library into its own strategic plan (Property 5E), thus pouring more resources into the library's strategic goals.

Category 5 and Category 3: Mutually Beneficial

Category 5 also has a mutually beneficial relationship with Category 3. This relationship is supported by the symbiotic relationships between the following properties:

- Property 5B: Using evidence-based measurements of value and Property 3C: Engaging internally within the university and Property 3D: Engaging with external stakeholders. Evidence-based measurements of value are gained through engagements with internal and external stakeholders. The measurements also allow the library to improve its engagement strategies.
- Property 5C: Demonstrating the library's value and Properties 3D: Engaging internally within the university and 3E: Engaging with external stakeholders. Engagements with stakeholders allow the library to demonstrate its value, but also to promote itself to stakeholders.
- Property 5D: Articulating the library's value and Properties 3D and 3E. The library reports the results of its engagements with stakeholders. The reporting back to stakeholders also allows the university to include library goals in its own strategic planning.

5.9 THE VISUAL MODEL OF THE SUBSTANTIVE GROUNDED THEORY

Charmaz (2014) acknowledges the importance of diagramming as "a visual representation of categories and their relationships" (p.218). The visual model below (Figure 5.7) illustrates the categories of the substantive grounded theory and the relationships between them. The hexagons represent the theoretical categories, which explain *what* happens. The categories represent the strategies that the participants use to maintain their library's relevance. Each of these strategies are part of Glaser's (1978, p. 76) *strategy* family of theoretical codes. The arrows represent the relationships between each strategy. One-way arrows explain one strategy leading to another in a causal relationship. This relationship belongs to Glaser's (1978, p. 74) process codes. The two-way arrows signify an interactive relationship, suggesting mutual effects or a mutual dependency. This relationship belongs to Glaser's (1978, p. 76) *interactive* family of theoretical codes. The spherical shapes represent the

relationship between Category 4 and all other categories. This relationship belongs to Glaser's (1978, p. 77) *cultural* family of theoretical codes.

Overall, the figure shows a cyclical process that begins with the university library aligning its strategic vision with that of the university. The creation of a library strategic plan enables the library to reinvent itself. Reinventing the library is the next phase in the process. The reinvention process occurs through the mutual dependence of this strategy with engagement strategy. The engagement with stakeholders also has a mutually dependent relationship with the strategy of demonstrating value to the university. The demonstration of value to the university then enables the university to review its strategic vision. The cycle then begins again.

Each of these strategies has a mutually beneficial relationship with the strategy of building an agile and engaged culture. The strategies involved in building an agile and engaged culture rely upon the social norms, values, beliefs and sentiments of the library and its staff (Glaser, 1978, p. 77).

The strategies for building an agile and engaged culture that are described in section 5.6 rely upon the library's social norms, values, beliefs and sentiments being attuned to agility and engagement. Similarly, the continuous realignment of strategy, and the constant reinvention of the library, engagement with stakeholders, and demonstration and promotion of the library's value ensure that the organisational culture is continuously agile and engaged. In short, the continuous practice of these strategies ensures that the library does not settle into a complacent routine.

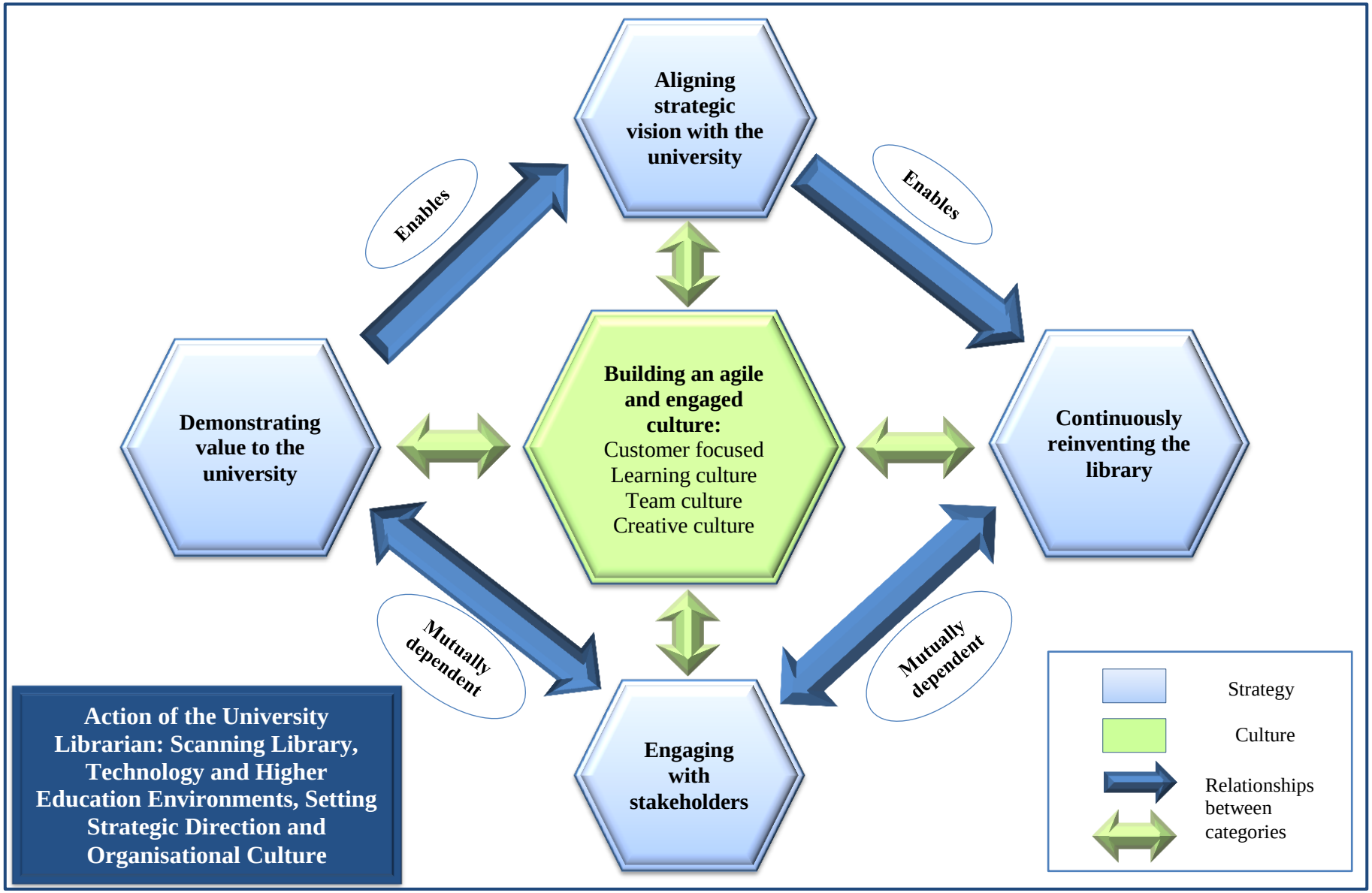

Figure 5.7. Theoretical model: How the University Librarian ensures the relevance of the library to its stakeholders

5.10 CONCLUSION

This chapter presented the findings from the analysis of the data from 14 interviews. The first section introduced the context of the study: the participants and the time frame of the interviews. The context also included an introduction to the five university types included in the study: United States state universities; and from Australia, Group of Eight universities, Innovative Research Universities, Regional University Network universities, and Australian Technology Network universities.

The findings included five conceptual categories: aligning library strategic vision with the university; continuously reinventing the library; engaging with stakeholders; building an agile and engaged culture; and demonstrating value to the university. Each category included the properties or processes that made up the category, and demonstrated the relationships between the categories. Each category included comparisons of participant data by university type and a table that summarised the comparisons of data. After the presentation of the categories and properties, the relationships between the categories were demonstrated and justified. Finally, the model for the substantive grounded theory was presented in Figure 5.7.

The next chapter (Chapter Six) summarises the substantive grounded theory and interprets the findings with a comparison and contrast of the perspectives of participants according to their university type. Chapter Six also discusses the contribution and relationship of the findings to current theory and research. It also considers the limitations of the study, its contributions to disciplinary knowledge and practice, and makes suggestions for future research.

Chapter 6: Discussion

Chapter Five reported the results of the research and generated a new substantive grounded theory that explains how the University Librarian ensures the relevance of the university library to stakeholders in the face of competition from open access information sources.

Chapter Six is primarily about sense making (Recker, 2013, p. 132). This chapter discusses the substantive grounded theory and makes comparisons between the various university types, relates the theory to other literature, and discusses its significance to both research and LIS practice. This chapter is organised into the following sections:

- A summary of the substantive grounded theory (6.1)
- The abstract theory: mutual dependency of strategy and culture (6.2)
- Discussion of variations and multiple perspectives (6.3)
- Situating the substantive grounded theory within the recent literature (6.4)
- Evaluation of the substantive grounded theory (6.5)
- Significance of this research for practice (6.6)
- Significance of this study for research (6.7)
- Limitations of the research (6.8)
- Conclusion (6.9)

Sections 6.1 to 6.3 of Chapter Six justify the theory as a constructivist grounded theory and interpret the findings. Section 6.4 returns to a specific literature review relating to the substantive grounded theory. Section 6.5 expands upon the co-construction of the substantive grounded theory, where participants were invited to discuss the emergent theory, its resonance and its relevance to their situation (Charmaz, 2014, p. 338). The final sections (6.6 to 6.8) discuss the significance and limitations of the research.

6.1 SUMMARY OF THE SUBSTANTIVE GROUNDED THEORY

The overall substantive grounded theory that is summarised in section 5.9 and visualised in Figure 5.7 of Chapter Five was co-constructed by the researcher and the participants. The substantive grounded theory begins with the role of the University Librarian in scanning developments in LIS, technology, the university, and the higher education policy and wider political environments. The theory includes four strategies that occur in a cyclical pattern. The entire strategic cycle is only successful when an explicit strategy of developing an agile and engaged culture is included.

The cyclical pattern begins with the university library aligning its strategic vision with that of the university. The aligned strategic plan of the library then leads to the next phase of continuously reinventing the library. The continuous reinvention process occurs concurrently and is in a reciprocal relationship with the strategy of engaging with stakeholders, which is also constant. Engagement with stakeholders then leads to and is in a mutually beneficial relationship with the strategy of demonstrating value to the university. When the library successfully demonstrates its value to the university, the library's goals are sometimes incorporated in the university's goals. The cycle begins again when external and internal factors (including successful library strategy and culture) once again impinge on the university, requiring it to change its strategic vision and goals.

6.1.1 Mid-range and Explanatory Theory

The integrated theoretical model presented in Figure 5.7 of Chapter Five illustrates how the theory meets the requirements for a substantive grounded theory (Charmaz, 2014, p. 344). The substantive grounded theory is mid-range and explanatory as discussed in section 3.3.1 of Chapter Three. As a mid-range theory, which is bound by time and context, the theory begins with the introduction to the participants (*who*), the context of the academic libraries (*where*), and the time frame of 2015 (*when).* This is presented in section 5.1 of Chapter Five.

What, or the factors that explain the phenomena, is presented in sections 5.2 to 5.7 of Chapter Five, as categories (the hexagonal shapes in Figure 5.7). *How,* or the relationships between the categories, is presented in section 5.8 of Chapter Five as the theory integration. The arrows in Figure 5.7 explain the relationships between the categories.

Why is present in the theory as the processes that underlie the factors and their links. In other words, each property explains why the University Librarian uses a strategy. The University Librarian uses the strategies to solve a problem. The problem begins each category. These factors are presented in sections 5.3 to 5.7 of Chapter Five.

6.1.2 The Interpretive Nature of Substantive Theory

The substantive grounded theory presented in Chapter Five meets the requirements for a mid-range and explanatory theory (Gregor, 2006), but Charmaz provides an alternative definition of theory that accounts for the interpretive world view. Charmaz (2014) comments that interpretive theory "assumes emergent, multiple realities; indeterminacy; facts and values as inextricably linked; truth as provisional; and social life as processual" (p. 231).

Charmaz (2014, p. 230) recognises that theory is the interpretation of the researcher and therefore reflexivity becomes important. Therefore, the researcher has provided some autobiographical information (section 4.1 of Chapter Four). The substantive grounded theory does not proclaim certainty about the findings, but rather the language used suggests their tentative nature.

The substantive grounded theory has also sought to account for the variations and multiple perspectives of the participants (Charmaz, 2014, p. 240). Therefore, the theory has included detailed description (Denzin & Lincoln, 2011, p. 9; Dey, 1993, p. 31). Quotes from the participants provide evidence that allows better understanding of the data (Cecez-Kecmanovic & Kennan, 2013, p. 123; Pickard, 2013, p. 12). Variations and multiple perspectives are also provided in the summary of participants' multiple perspectives that are provided in each category of the substantive grounded theory (sections 5.3.7, 5.4.7, 5.5.7, 5.6.8, 5.7.8).

The substantive grounded theory has also sought to analyse the assumptions that underlie the actions (Charmaz, 2014, p. 241). For example, P3 acknowledged the difficulty in attracting qualified and experienced staff to the regional areas of Australia. Both P4 and P12, from RUN libraries, emphasised that much work is invested in training and communicating with library staff. Therefore, one such assumption is that the regional libraries will train their available staff rather than

engage in the redundancies that occur in the major restructures in the city universities, as discussed in section 6.3.4.

Charmaz (2014, p. 230) argues that interpretive theory aims for "abstract understanding", rather than for explanation. This theory meets this requirement by also providing an abstract understanding of the substantive grounded theory. The abstract understanding of the substantive grounded theory is presented below in section 6.2.

6.2 THE ABSTRACT THEORY: MUTUAL DEPENDENCY OF STRATEGY AND CULTURE

This section abstracts the substantive grounded theory to theoretical concepts, and theorises about the results (Recker, 2013, p. 132). The substantive grounded theory presented in the visual model of section 5.9 of Chapter Five is interpreted and presented here as abstract theory. An abstract theory moves beyond description to theorising (Charmaz, 2014, p. 246). Urquhart et al. (2010, p. 365) recommend that a theory should have a greater scope beyond the scope of the substantive theory. Therefore, they recommend *scaling up* of high level categories into "higher level core categories" (Urquhart et al., 2010, p. 372). Charmaz recommends such scaling up, but calls this "raising categories to concepts" (Charmaz, 2014, p. 247). Thus, for Charmaz (2014), "theoretical concepts serve as interpretive frames and offer an abstract understanding of relationships" (p.248).

6.2.1 Strategy

The theoretical model (Figure 5.7) features four substantive categories that are scaled up to the theoretical concept of strategy (Glaser, 1978, p. 76). These categories are: Aligning strategic vision with the university, Continuously reinventing the library, Engaging with stakeholders and Demonstrating value to the university. The substantive category of Building an agile and engaged culture is scaled up to the theoretical concept of culture (Glaser, 1978, p. 77), but it is also a strategy because "the inplay [sic] of interactive effects is clearly related in some cases to the strategy family, when one actor is purposefully trying to advantage or position himself" (Glaser, 1978, p. 76).

6.2.2 Culture

Cameron and Quinn (2011) define organisational culture as "the taken-for-granted values, underlying assumptions, expectations, and definitions that characterize organizations and their members" (p. 18). According to Jeal (2014, p. 285) culture is necessary to support strategic development. However, changing to a desired organisational culture requires a strategic approach through change management. The change of culture and therefore to the attitudes of staff requires changes to the status quo, the implementation of changes, and ensuring the changes will stay (Kotter, 1996, p. 22). Mandeville-Gamble (2015, p. 8) suggests the strategic recruitment, promotion and rewarding of staff who are aligned with the strategic vision is an effective implementation technique.

In this substantive grounded theory, the University Librarian strategises and nurtures culture by ensuring the staff members reflect the values and expectations of a library that is agile and engaged with stakeholders.

6.2.3 Mutual Dependency of Strategy and Culture

Figure 5.7 (section 5.9) depicts the theoretical concepts of culture and strategy as mutually dependent. Mutual dependency belongs to Glaser's interactive theoretical coding family. According to Glaser (1978) "this code is an effort to capture the interacting pattern of two or more variables, when the analyst cannot say which comes first" (P.76).

Strategy and culture are mutually dependent because attributes of culture are present in each of the strategies. Aligning library strategic vision with the university requires the library to have a creative and customer-focused culture that enables strategic thinking. Continuously reinventing the library necessitates an agile culture that incorporates a learning culture and a team culture. Engaging with stakeholders entails an engaged culture that is customer-focused. Demonstrating the library's value involves an engaged culture that enables the library to promote itself and its achievements.

The mutual dependence of strategy and culture is also explained in detail in section 5.8 of Chapter Five. The continuous nature of strategic alignment, library reinvention, engaging with stakeholders and demonstrating value attracts and retains staff members who share the values of agility and engagement.

6.3 DISCUSSION OF VARIATIONS AND MULTIPLE PERSPECTIVES

This section discusses the variations and multiple perspectives of the participants according to their institution type (Charmaz, 2014, p. 240). Sections 6.3.1 to 6.3.5 analyse each category for comparisons between institution types.

6.3.1 Category 1: Aligning Strategic Vision with the University

The data provided in Chapter Five show all participants were aware of the need to align with the university's strategic priorities. The participants from the IRU universities were paying the most attention to aligning the library's strategy with the university's strategy at the time of the interviews.

1A: The Problem: Uncertainty about the Future

According to Property 1A in the summary of data in Table 5.2, all participants were aware of the challenge of change. However, many of the Australian university librarians (P2, P3, P4, and P7) noted that there was a complacent attitude in the university library sector, as P2 stated:

> *I think for a long time we've been quite comfortable in the fact that we are wonderful and they know we are wonderful, therefore all is OK.*

1B: Response Phase: Responding to Changes in University Strategy

According to the summary of data in Table 5.2, all participants from all university types were aware of the need to scrutinise the university's strategic priorities. However, a difference that emerges from the data is that the smaller RUN libraries had not been subjected to university-wide restructures; whereas the larger city-based universities had been forced to respond to such measures with their own library restructures (P2, P3, P5, P7, and P9).

1C: Strategy: Thinking Strategically to Enhance the University's Profile

Another major contrast between Go8 libraries and P4 in particular, appears to be in orienting the library to a research focus. P4 indicated that this had been a challenge because of RUN-1's small size and lack of research base:

> *…so that's been quite an adjustment for a lot of our academic staff who have been under a lot of pressure to start producing research and publishing more, and all that sort of thing, and so the library has, in order to stay relevant to them, has had to provide a different set of support which required*

some different sets of skills from our librarians as they had to brush up on things like bibliometrics and that sort of thing.

1D: Culture: Thinking Creatively and Being Customer-Focused

Most university librarians acknowledged the need to be creative and customer-focused.

1E: Goal: Planning for an Aligned Library

While most of the University Librarians acknowledged the need to plan and to have a plan that was aligned with the university's strategic planning, the RUN librarians were not focused upon this area. It is possible that the reason for this is that planning occurs at the next hierarchical level, as P4 states:

I think once again, because we are quite small, our director has a very strong relationship with the executive and has a lot of input into planning, and discussions that might relate to new changes and things like that.

6.3.2 Category 2: Continuously Reinventing the Library

Participants from all university types were equally aware of the need for reinventing the library and addressed this area in the interviews.

2A: The Problem: Knowing the Limits

While all participants from all university types acknowledge that stakeholder requirements created limitations, the ATN universities appeared to show less concern about the limitations of budget cuts. For P2 of ATN-1, the reason for this is:

We're also very lucky that, even with deregulation coming, our budget, our finances have been managed extremely well. Even though we will receive federal government funding cuts, the university has decided to continue to fund programs because we are financially viable enough to do so.

The two USSU libraries appeared to be less concerned about the external cost pressures caused by changes in the currency rate. While the data does not provide any indication of the reason for this, it is possible that this is because the Australian libraries rely more upon international publishers than do the American libraries.

2B: Strategy: Transforming the Library

All university types engage in transformation. However, there are some differences in the way they go about this process. The data in Table 5.3 shows that

there was an overall agreement that the library needed to be transformed in order to prepare for a future of technological innovation. However, some of the libraries required transformation because of university budget cuts and structural problems within the library.

There are sharp contrasts between the transformation process of the larger libraries and the smaller regional libraries. Both RUN libraries enact restructuring in consultation with staff, with the purpose of encouraging staff to retrain and multi-skill in new areas. This may indicate the problems the regional libraries appear to have in attracting qualified staff to move to regional areas. Therefore, they invest in retraining, rather than in employing staff with the appropriate skills.

On the other hand, the restructuring process leads to redundancies and the employment of staff with the required skills in the larger libraries such as the Go8 libraries and IRU-2. Libraries in metropolitan areas have a larger employment pool from which to choose employees, as discussed in Property 2B (section 5.4.3).

2C: Mechanisms: Developing Learning and Knowledge Management Infrastructure

According to the summary of data in Table 5.3 all university types engage in developing learning and knowledge management infrastructure. All University Librarians in the study emphasised the importance of learning from other leaders, and the Australian participants referred to the importance of CAUL frequently. Collaborative decision making was also important across all University types.

2D: Culture: Encouraging an Agile Culture

All University Librarians in the study are aware of the importance of an agile culture and of the leader's role in developing learning that will encourage agility. While all university library types encourage staff learning through formal professional development and other formal types of learning, the participants from Go8 libraries did not contribute in the discussion about informal types of learning.

The challenge of reinventing the core notion of what is the library appears to be less of a challenge in smaller academic libraries, but seems to be often a major challenge in the larger and older libraries (Go8). According to the data, the smaller libraries regarded themselves as agile and saw their size as a benefit (P4, P10). For

P4, from RUN-1, change was normal, but this was because the institution was relatively young:

> *I think generally, we cope with change reasonably well because we've lived with it virtually non-stop since we started. Because of the growth and because of our age, we've had to keep moving with change. We haven't really had a chance to sit back and wallow in the norm, I guess. Change has been pretty much a part of what we do a lot of the time.*

P4 explained this further in terms of RUN-1 library's decision to subscribe to e-journals rather than print journals. The decision to subscribe to e-journals rather than to print journals was made at an early stage, and did not cause any repercussions from faculty.

This starkly contrasted with the experience of P5 from Go8-1 and P6 from Go8-2. P6 stressed several times that the library was expected to maintain print collections. Go8 universities would appear to be alone of all university types in coping with faculty members that are sometimes stridently opposed to change, as explained by P5 "*Well, it's happened in the past here and in other universities where academics just go to the media rather than taking it up internally".*

P10 stated on several occasions that being small was beneficial for the library:

> *Because we are a very small organisation - we've only got about 80 people - we have a relatively small budget which, I think is a catalyst for keeping us more agile. We have to run on the smell of an oily rag, so that makes you very agile. It makes you think very carefully about where you put your effort. Where is that going to deliver the best impact or perceived value to the institution?*

While P10 stated that IRU-3 was small, its student population was still much larger than that of RUN-1. The difference here is that RUN-1 had a less well-established university with fewer research students. RUN-1 was focused upon rapid change in terms of adding faculties, and therefore the library was focused upon keeping up with those changes.

2E: Goal: Making Evidence-Based Decisions

Significantly, participants from all university library types understand the importance of evidence-based decision making. All participants were asking about

stakeholder requirements and whether the library was meeting their needs, and they recognised the need to scan both the internal and external environment and to be critical in their analysis of the evidence.

6.3.3 Category 3: Engaging with Stakeholders

Participants from all university types spoke about engagement with stakeholders. USSU libraries feature least in this category, and it is possible that this is because engagement was an area of interest and development for CAUL at the time of the interviews, and therefore was an important topic to the Australian University Librarians.

3B: Strategy: Knowing the Stakeholders

All participants emphasised the importance of knowing their stakeholders. According to the data, a major difference between the Australian and the two US participants appears to be in the way they perceive their responsibility towards the state and its citizens. Both USSU Librarians nominated the State, its government and its citizens as their major stakeholder. They recognised their responsibility to assist in producing graduates who are able to contribute towards the society through their chosen professions (P1). P9 pointed out *"...we have a responsibility to the state. So, our community in general is all state citizens".* P4 was also deeply conscious of the rapid development of the community in the regional area, and how this development required the library to adjust. P4 states that stakeholders are *"the regional community".*

However, it would appear that the sense of responsibility to the government and its citizens was largely absent from the discourse of the Australian university librarians. It would appear that for most of the Australian university librarians, community stakeholders were seen as library users, potential students of the university, or as potential donors. Therefore, the Australian university librarians appeared to regard their relationship with the community as one of promoting the library and the university.

The university as a business also becomes part of the dialogue in the Australian context. This approach to the university's extended community possibly stems from the longstanding history of government funding in the Australian higher education sector. As government funding declines, new sources of funding are sought from the

private sector. Indeed, P11 noted that philanthropy is not a tradition in Australia as it is in North America:

> *Unlike, say, North America, there's not a huge tradition of philanthropy towards higher ed [sic] in Australia but beginning to grow. This university has focused a lot of energy on developing the capacity to fundraise for the university, but the library's never been sort of, a target for that activity. One of the positions that we want to create was an advancement manager position to start building a case that whether it's Specialist libraries, special collections, or the fact that we're overcrowded and need to renovate and new spaces - developing the case that the library can be an attractive target for philanthropy.* (P11)

The Go8 University Librarians showed great interest in the development of an engagement framework. The ATN libraries also were aware of the requirement for a holistic approach to engagement, while all participants were aware of the nuances of communication for each stakeholder type.

3C: Strategy: Encouraging an Engaged Culture

For participants of all university types, customer focus and engagement was important, although the Go8 University Librarians did not mention flexibility or responsiveness.

3D: Strategy: Engaging with University Stakeholders

In the Australian context, the data shows that universities are overwhelmingly focusing upon researchers. This is because, as P2 stated, while teaching is an important contributor to university finances, the current government funding model favours research and grant income. Engagement with researchers in order to promote their research and the university as a research institution, and promoting the library as a facilitator for research is an important emerging theme for all university types. While the smaller regional libraries face a similar challenge, they are servicing a smaller number of researchers amongst a diverse student population (P4).

Another area of contrast is that the stakeholders of libraries in more regional areas (RUN libraries, IRU-2) are more diverse than any of the university types, requiring more engagement activity with students than the larger metropolitan libraries (Property 3A: Coping with diversity of stakeholders and their requirements).

These academic libraries support struggling first year students and TAFE students, while Go8 universities generally have fewer students requiring this type of support.

Libraries in larger institutions and Go8 libraries in particular, appear to have greater capacity for engagement with stakeholders in terms of resources, staffing, and building spaces. The Go8 universities possess greater resource capacity to employ staff to perform the important marketing or fundraising functions. P5 and P11 remarked upon the employment of marketing and promotional staff. P5 mentioned a number of vehicles for engagement:

> *…at the moment the university has an insert into the state's daily newspaper. We generally try and get a library story in every one of those issues. We are fortunate that we have quite rich cultural collections at this university. We've got the richest of those in Australia. So we've got a lot of museums and galleries and about a third of those collections actually sit under the library. We've got a lot of rare books, and those sorts of collections. And we also do have a lot of events.*

It is also appears from the data that in contrast with the larger libraries, the smaller libraries such as RUN libraries seemed to engage more with their stakeholders at the individual level. For P4, individualised service had been successful, but with growth, required change:

> *Our staff are very used to and very committed to nurturing our students, I suppose, and providing quite an individualised support which you wouldn't get in a larger institution necessarily. Which sounds wonderful, and it is wonderful, but it's not really sustainable as we grow. So it's trying to move our staff away from "quality service means holding somebody's hand until they get it right even if it takes an hour ", to "quality service means something different".*

3E: Strategy: Engaging with External Stakeholders

There is also some variation in the university library types in this sample in the ways they engage with external stakeholders. One contrast is that Go8-1 University benefited from the good will of high profile supporters and alumni:

> *A chairman of the board of a high profile company has basically been our champion and helping opening doors for us with potential donors. Again, we're working with champions to help us open doors. Similarly, with*

fundraising for the archives we've been going to CEOs of major companies that are the current companies that we hold the archives of maybe their predecessor companies. (P5)

On the other hand, the research universities in regional areas indicated that they relied heavily upon donations of special collections. For example, P3 from IRU-1 focused upon engagement with donors:

For my university, we have a very unique special collections [sic] that reflects decades of collecting to reflect the region. And so the most important role of our special collections librarian isn't so much the curatorship, it's the engagement with potential donors, independent researchers and other researchers.

6.3.4 Category 4: Building an Agile and Engaged Culture

4A: The Problem: Culture of Complacency

A number of participants noted that a culture of complacency exists in university libraries (P3, P4, and P7), and significantly, these participants are from the universities in regional areas: IRU-1 (P3), RUN-1 (P4), and IRU-2 (P7). Therefore, there are a number of areas of contrast in the category of Building an agile and engaged culture.

4B: Strategy: Future Proofing the Workforce

The first area of sharp contrast is in the way the university libraries are future proofing the library through workforce planning and development. Most of the participants spoke at length about the skills and behaviours required for the future. However, according to the data shown in Table 5.5, the RUN libraries spoke less about the workforce and skills required for the future. Rather, the RUN libraries put more energy into training and multiskilling their current staff rather than in engaging in large-scale restructuring that requires redundancies and the hiring of new staff. For example, P12's restructure focused on ensuring the current staff members are able to understand the skills required in the new library environment, preparing them for such change. P4 adopts a similar approach, stating:

And that's very good for staff too in a way, because they get a chance to do other things and because we've done some restructures and joined teams, and done multiskilling and a whole lot of things like that so that we can

actually have staff to back up others where they probably wouldn't normally do that particular task in another institution.

In contrast with this approach, the larger metropolitan libraries engage in large-scale restructuring that entails redundancy and hiring of new staff (P2, P5, P6, P7, and P11). The evidence indicates that the probable reason for this contrasting strategy is the difficulty in persuading qualified persons to move to regional areas, as P3 had revealed, while the university libraries in metropolitan areas have access to a larger talent pool.

4C, 4D, 4E and 4F: Building Culture

The first contrast between the university types seems to be that the more traditional Go8 libraries place less emphasis upon agility than many of the other types of library. Go8 participants were not using terms or phrases that suggested agility. In contrast, RUN-1 library, all IRU universities and both USSU's expressed concern that the library should be able to adapt quickly to changes. It is possible that this is because the smaller libraries claim they have lean staffing and are able to adapt quickly (P3, P4, and P10). Indeed, P10 claims that its small budget makes it naturally more agile. P4 states *"we've got to be aware; we've got to be flexible enough to change as required".*

Another important area of divergence of strategy is in the area of learning. Here, the Go8 libraries stress the importance of formal types of learning such as professional development, research and systematic reviews of systems and services. They do not address the informal types of learning such as experimentation, collaboration on projects and reflection. A final area of divergence of strategy appears to be in the area of team culture. In the interviews the Go8 University Librarians were less focused upon an egalitarian or collaborative approach with staff, although they did discuss the importance of communication and consultation with staff (P5, P11).

6.3.5 Category 5: Demonstrating the Library's Value

At the time of the interviews, the IRU and ATN libraries had put much consideration into the demonstration and articulation of the library's value. In contrast, the University Librarians of the RUN libraries commented less about the demonstration and articulation of value. It is possible that the reason for this is that

both participants from the RUN libraries claim to have a supportive administration and they benefit from the advocacy of their managers.

5A: The Problem: Struggling to Demonstrate the Library's Value

Table 5.6 shows that the Australian university libraries commented upon the difficulty of demonstrating the library's value to the university. Indeed, all Australian University Librarians alluded to the difficulty of demonstrating the library's value. This problem does not appear in the interviews with USSU University Librarians.

5B: Strategy: Using Evidence-Based Measurements of Value

Table 5.6 shows very little variation in the data across university types in the way they use evidence-based measurements of value. All University Librarians discussed the use of both quantitative and qualitative data. The RUN library participants were less concerned with global rankings as were the larger research libraries.

5C: Strategy: Demonstrating the Library's Value

According to Table 5.6, participants from all university types showed an understanding of the importance of understanding the way decisions are made in the university and of gaining political support for the library. An area of contrast is that the larger university libraries appear to have the resources that enable them to raise their visibility through marketing, social media and the creative use of library space. This contrasts with the smaller libraries such as RUN libraries where resource restrictions mean they rely heavily upon the advocacy of others in the university, or upon their own energetic and proactive behaviour in, for example, providing programs to schools or participating in university committees.

5D: Strategy: Articulating the Library's Value

Most of the participants discuss the importance of using the university's strategic language and reporting on their progress with strategic goals such as student success.

5E: Culture: Engaging with Stakeholders and Promoting the Library

The culture of engagement is regarded as important to all participants from all university types, with much emphasis upon the importance of collaboration, flexibility and agility. It is possible that the Go8 Librarians regard engagement as promotional activity.

5F: Goal: Achieving Measures of Success

Most of the participants referred to the various ways in which they measure their success in demonstrating the library's value.

6.4 LITERATURE REVIEW: THE SUBSTANTIVE GROUNDED THEORY AND CURRENT THEORETICAL FRAMEWORKS

The review of the literature in the discussion section differs from the earlier literature review of Chapter Two. The purpose of the earlier literature review was to determine the gap in the literature and to justify the need for the research. The earlier literature review discussed the two theories that related to how organisations maintain their relevance: learning organisation theory and the theory of dynamic capabilities.

This literature review (section 6.4) adheres to the crucial point Charmaz (2014) makes that "any researcher should tailor the final version of the literature review to fit the 'specific' purpose and argument of his or her research report" (p.307). Therefore, this literature review is tailored to the specific findings of the substantive grounded theory. Sections 6.4.1 to 6.4.5 discuss each of the categories of the substantive grounded theory in the following sections:

- General theoretical background that defines each conceptual category
- The application of each conceptual category in LIS literature
- Evaluation of the findings of this research in the light of other LIS research studies

Section 6.4.6 compares and contrasts the most relevant theoretical frameworks to the overall substantive grounded theory. These theoretical frameworks are: learning organisation theory, dynamic capabilities of competitive advantage, stakeholder relationship management theory, and evidence-based library and information practice (EBLIP). The inclusion of stakeholder relationship management theory demonstrates that Category 3: Engaging with stakeholders was not significantly represented in the two theoretical frameworks of the original literature review (Chapter Two). Similarly, the inclusion of EBLIP was necessitated by the emergence of Category 5: Demonstrating the library's value. EBLIP provides a specific solution relevant to the applied LIS domain because participants identified that university libraries struggled to demonstrate their value to the university.

Section 6.4.7 discusses the mutually dependent relationship between culture and strategy as found in the substantive grounded theory is compared with the competing values framework (CVF) of Cameron and Quinn (2011). CVF is included because the research findings demonstrate the importance of an organisational culture that encourages agility and engagement.

6.4.1 Category 1: Aligning Strategic Vision with the University

Category 1 (section 5.3 of Chapter Five) of this substantive grounded theory finds that the University Librarian ensures that the vision, goals and strategy of the library are aligned with those of the university by responding to the changes in university strategy, thinking strategically and creatively to enhance the library's profile, and then creating the library's own strategic plan.

Theoretical Background

According to Bourne (2009) "successful delivery of an organisation's activity" includes "alignment of the activity to the organisation's strategic, operational or tactical objectives (delivery of value)" (p.15). Therefore, the leader acts to create a vision that is aligned to the wider organisation. According to many authors leadership requires vision (Kotter, 1996; Mandeville-Gamble, 2015; Marsick & Watkins, 1999; Nanus, 1992; Pearn et al., 1995; Senge, 1990; Watkins & Marsick, 1993). Tellis (2006, p. 37) argues that the will of a visionary leader sees the organisation thriving upon the new vision rather than failing in the face of disruptive technology or innovation. Therefore, the leader's persistence in implementing a strategic plan is imperative.

Nanus (1992) provides guidelines for visionary leadership for public sector organisations such as government departments. This sector's commitment to public service and financial accountability; its adherence to legislation and government guidelines; and its sensitivity to stakeholder groups relates closely to the university library's relationship to the university and to its various stakeholder groups.

LIS Research Literature

Academic libraries are changing their relationship with their users according to the larger goals of the university (Franklin, 2009; Johnson et al., 2015, p. 10; McNicol, 2005; Saunders, 2016). There are numerous single case studies concerning the strategic alignment of university libraries (Franklin, 2009; Jeal, 2014; Nutefall &

Chadwell, 2012; Wynne, Dixon, Donohue, & Rowlands, 2016). Each of these case studies tend to be descriptive rather than providing analysis of the processes involved in aligning the library's strategic vision with that of the university.

The research studies of Saunders (2015) and Saunders (2016) provide content analysis of 63 publicly available strategic plans of libraries that are members of the Association of College and Research Libraries (ACRL). These studies analyse the strategic directions being taken by American academic libraries, and finds that they are failing to explicitly align their strategic plans with those of the parent institution.

Robertson (2015) uses qualitative interviews with provosts of Canadian universities to determine their perceptions of the library's alignment with the institutional mission. This constructivist grounded theory research complements and extends Robertson's work (2015) by examining the perceptions and actions of the University Librarian in aligning the library's strategy with that of the university.

The multiple case study research of Casey (2011, p.323) is significant because it discusses the Library Director's (University Librarian's) role and finds that each of the libraries studied showed alignment to and support of their universities' strategic vision. However, this constructivist grounded theory research extends Casey's (2011) work further by examining the processes involved in aligning strategy.

The substantive grounded theory extends all the research cited above and adds an original contribution by developing a unique substantive grounded theory that explains the processes involved in aligning the library's strategic vison with that of the university. The detail of this process and how it relates to recent LIS research literature is shown in sections 1A to 1E below.

1A: Increasing Uncertainty about the Future

Property 1A (section 5.3.2 of Chapter Five) finds that the University Librarian participants perceive that universities are affected by increasing uncertainty. Universities are similar to public sector organisations because they must respond to constant changes in legislation, financial pressures, and pressures from stakeholder groups and the media (Nanus, 1992, p. 189) . The findings of Property 1A are comparable to the findings of the ethnographic research of Otero-Boisvert (2015, p. 264) that the external forces of the general economy, political context, higher

education trends, demographic trends and accreditation issues affect the fortunes and strategy of the university.

1B: Responding to Changes in University Strategy

Property 1B (section 5.3.3 of Chapter Five) finds that the library must respond by altering its strategy in accordance with the university's change in strategic direction. These findings add empirical basis to the arguments of Robertson (2015), or Mandeville-Gamble (2015), who states:

> Once a library leader has come to fully understand the cultural values of the organization, developed a strong organizational vision statement, identified how that vision will disrupt the status quo, and identified what needs to be communicated, the leader needs to determine how to communicate that vision (p.4)

The substantive grounded theory complements and extends the qualitative study of Robertson (2015), who investigated the perceptions of Canadian University Provosts on the institutional role of academic libraries, by providing the perceptions of the University Librarians. The substantive grounded theory produced by this research also provides an understanding of the process required in responding to changes in university strategy.

1C: Thinking Strategically to Enhance the University's Profile

The substantive grounded theory (section 5.3.4 of Chapter Five) finds that the participants consider changes to the university strategic plan as opportunities to enhance the library's profile and visibility. These findings provide empirical basis to the argument of Nanus (1992, p. 81), that the visionary leader sees future developments as opportunities for the organisation. These findings also provide an empirical basis to the theoretical work of Goldman and Casey (2010) and Casey and Goldman (2010), who define strategic thinking as "conceptual, systems-oriented, directional, and opportunistic thinking" (Goldman & Casey, 2010, p. 120).

The results of the substantive grounded theory resonate with the research of Robertson (2015, p. 498) who finds that Canadian University Provosts regard their libraries' expanded roles as having contributed significantly to the university's mission. It also extends a case study of the University of Leicester library's strategic alignment with the university, allowing the library to then position itself as:

> …a proactive partner and collaborator in the creation and dissemination of knowledge, drawing on the unique set of information skills and expertise, which the library could offer and develop within the university. (Wynne et al., 2016, p. 9)

The finding that academic libraries are performing core functions in new ways compares with the research of Saunders (2015, p. 288) and Wynne et al. (2016) who find that the repurposing of physical space for students collaborative work and research is a major strategy for libraries. Saunders (2015) also discovers that the provision of virtual space, the digitisation of collections and expanding the institutional repository are new ways of expanding access to collections. The finding that the university libraries are concentrating upon engagement and collaboration also reflects the research of Saunders (2015, p. 288) and Franklin (2009).

This research finds that the university's teaching and learning activity is supported by the library. This finding overlaps with various studies (Denda, 2015; Franklin, 2009, p. 503; Saunders, 2015, p. 288). Wynne et al. (2016, p. 2) report the library's role in creating open access to the university's research publications through the institutional repository, while also assisting researchers with the publication process. Wynne et al. (2016, p. 2) also describe the library's critical role in providing support for the university's research strategies and grant application process by providing bibliometric data that analyses the university's research outputs.

1D: Thinking Creatively and Being Customer-Focused

The substantive grounded theory finds that the library requires a culture that is creative and customer-focused in order to align with the university's vision (section 5.3.5 of Chapter Five). The finding about customer focus is possibly reflected in the case study of the University of Connecticut (Franklin, 2009, p. 503) where the library is involved in creating a more inclusive community. The multiple case study research of Casey (2011) is significant in finding that the academic library should be service oriented and customer-focused. However, there is little research that finds the requirement for a creative library culture, and therefore this substantive grounded theory provides original findings about creative library culture.

1E: Planning for an Aligned Library

The findings of section 5.3.6 of Chapter Five, that the University Librarian plans for an aligned library significantly adds to the research literature about library

strategic planning processes. The wider work of Nanus (1992) describes how a strategic plan may operate in a public sector organisation. Such a strategic plan involves a vision audit; an audit of stakeholders, their requirements and expectations; a survey of threats and opportunities; and performance measurement indicators (Nanus, 1992).

There is very little literature that examines the processes of strategic planning in academic libraries. Hernon et al. (2014) discuss evidence-based planning and decision making as part of the planning process. Zaugg (2015) suggests the need for a library impact map (LIM) to enable strategic planning. Dole (2013, p. 284) uses a literature review to describe the steps in strategic planning as: vision for the future, a framework of core values for achieving the vision, an environmental scan of issues that may affect the achievement of the vision, developing goals and strategies, and implementing the plan.

The strategic planning process the substantive grounded theory describes in Category 1 (section 5.3) extends the prior research of Casey (2011), Franklin (2009) and Nutefall and Chadwell (2012). Casey's multiple case study research (2011) finds that each academic library studied aligns its strategic planning with that of the university, but does not explore the processes involved. Franklin (2009, p. 499) describes the University of Connecticut's approach to the university strategy as beginning with a meeting with administrators to understand the university plan, engage staff in environmental scans and analysing data, and directing a strategic planning team to determine goals. Nutefall and Chadwell (2012) describe a similar process in a single case study about the library realignment at Oregon State University.

This substantive grounded theory adds significantly to the case studies of Franklin (2009) and Nutefall and Chadwell (2012) by providing a broader empirical study and an original contribution of an integrated theory about how the university library aligns its strategy with that of the university.

Original Contribution of this Research

Table 6.1 below demonstrates that, while many of the findings of this substantive grounded theory are similar to, or extend the findings of prior studies, no work appears to discuss the necessity of a creative library culture. This research also

provides an original research contribution by generating a substantive grounded theory that integrates the processes involved in library strategic planning. The areas of originality in this substantive grounded theory are highlighted yellow.

Table 6.1

Key Findings of Category 1 and their Relationship to Recent Literature

Key Findings of this Research	Literature Reference	Type of Literature	Relationship to literature
Category 1: Library alignment with strategic vision: Theoretical background	*Bourne (2009)	*Text (Project management)	*Application to LIS & offers empirical basis
	*Marsick and Watkins (1999)	*Theoretical	*Application to LIS & offers empirical basis
	*Marsick and Watkins (2003)	*Theoretical	*Application to LIS & offers empirical basis
	*Nanus (1992)	*Theoretical	*Application to LIS & offers empirical basis
	*Pearn et al. (1995)	*Theoretical	*Application to LIS & offers empirical basis
	*Senge (1990)	*Text (Management)	*Application to LIS & offers empirical basis
	*Tellis (2006)	*Theoretical	*Application to LIS & offers empirical basis
Category 1: Library alignment with strategic vision: LIS research	*Casey (2011)	*Multiple case study	*Extends - Adds original integrated theory
	*Franklin (2009)	*Single case study	*Extends - Adds original integrated theory
	*Jeal (2014)	*Single case study	*Extends - Adds original integrated theory
	*Johnson et al. (2015)	*Expert panel	*Extends - Adds original integrated theory
	*McNicol (2005)	*Mixed methods	*Extends - Adds original integrated theory
	*Nutefall and Chadwell (2012)	*Single case study	*Extends - Adds original integrated theory
	*Saunders (2016)	*Content analysis	*Extends - Adds original integrated theory
	*Wynne et al. (2016)	*Single case study	*Extends - Adds original integrated theory
1A: Uncertainty	*Otero-Boisvert (2015)	*Ethnography	*Similar findings
1B: Responding to changes in university strategy	*Mandeville-Gamble (2015)	*Theoretical	*Provides empirical basis
	*Nanus (1992)	*Theoretical	*Provides empirical basis
	*Robertson (2015)	*Interviews with University Provosts about library alignment	*Complements & extends to experience of University Librarians

Key Findings of this Research	Literature Reference	Type of Literature	Relationship to literature
1C: Thinking strategically to enhance the university's profile	*Casey and Goldman (2010) *Goldman and Casey (2010) *Nanus (1992) *Robertson (2015) *Wynne et al. (2016)	*Theoretical *Qualitative interviews *Theoretical *Interviews *Case study	*Provides empirical basis *Extends to LIS domain *Provides empirical basis *Extends to experience of University Librarian *Similar findings
Refreshing core functions	*Franklin (2009) *Saunders (2015)	*Single case study *Content analysis	*Similar findings *Similar findings
Supporting teaching and learning	*Denda (2015) *Franklin (2009) *Saunders (2015)	*Single case study *Single case study *Content analysis	*Similar findings *Similar findings *Similar findings
Supporting research	*Wynne et al. (2016)	*Single case study	*Similar findings
1D: Thinking creatively and being customer-focused	*Casey (2011)	*Multiple case study	*Extends with original findings about creative culture
1E: Planning for an aligned library	*Casey (2011) *Dole (2013) *Franklin (2009) *Nutefall and Chadwell (2012) *Nanus (1992) *Zaugg (2015)	*Multiple case study *Literature review *Single case study *Single case study *Theoretical *Opinion	*Extends Adds original integrated theory *Provides empirical basis *Extends Adds original integrated theory *Extends Adds original integrated theory *Application to LIS and provides empirical basis *Provides empirical basis

6.4.2 Category 2: Continuously Reinventing the Library

Category 2 (section 5.4 of Chapter Five) of the substantive grounded theory finds that the University Librarian must respond to limitations and challenges in the library's environment by continuously reinventing the library. This process begins when the University Librarian personally learns from other University Librarians and leaders in the global university library environment, scans the higher education and parent university environment, and researches management and technological innovation. The University Librarian then develops learning and knowledge management infrastructure that enables all library staff to develop scanning skills. The University Librarian also develops an agile culture that will enable all library staff to make evidence-based decisions.

Theoretical Background

The findings of Category 2 concerning the need to continuously reinvent the library bear similarity to the management concept of continuous improvement (CI) which is the "business process of evident and intermittent incremental innovation with the use of few resources" (Bessant, Caffyn, Gilbert, Harding, & Webb, 1994, p. 251).

The findings of this research also discuss the requirement for transformational change, which various authors agree requires a planned strategy that will, over time, radically change both the structure and culture of an organisation (Burns, 2003; Mavrinac, 2005, p. 393; Mossop, 2013b, p. 7) . These findings reflect the views of authors who see the need for more action than CI (Sower & Fair, 2012), particularly when disruptive technology makes academic library services irrelevant to stakeholders (Tellis, 2006, p. 36; Yeh & Walter, 2016). However, this research finds that the University Librarians are reluctant to introduce radical change because of its disruptive effects, preferring the incremental change of CI.

The substantive grounded theory also finds that academic libraries struggle to achieve balance in service offerings. This difficulty relates to Bourne's (2009, p. 18) concept of management of risk as a factor in the success of the organisation in delivering its activities. This element relates to "minimising potential risks while maximising potential opportunities" (Bourne, 2009, p. 18). This involves much work around balancing the opportunities while also considering the risks and involves "balancing tactical work and operational work" (Bourne, 2009, p. 18).

LIS Research Literature

Numerous LIS studies address how CI is used in academic library web environments (Loftus, 2012; Manuel, Dearnley, & Walton, 2010; Shaw & Spink, 2009). Yet, none of these studies investigate how CI is used in the wider academic library environment.

Transformational change is also addressed by various researchers (Mavrinac, 2005; Mossop, 2013a), but Mavrinac (2005) discusses transformational leadership under the lens of learning, and Mossop's (2013a) work is based upon several case studies. However none of this research addresses the overall process in continuously

reinventing the academic library that includes both incremental and transformational change, and the need to continuously change the balance in service offerings.

Much LIS empirical research includes single case studies that describe the changes made to academic libraries (Derven & Kendlin, 2011; Jeal, 2014; Michalak, 2012; Nutefall & Chadwell, 2012; Somerville, 2015). A large number of LIS research studies also investigate the individual elements involved in continuous reinvention, but there is no literature that explores the process in continuously reinventing the library.

Therefore, this substantive grounded theory extends previous literature and provides an original contribution to LIS research literature by providing a substantive grounded theory that explains the processes that the University Librarian enacts in order to continuously reinvent the library. The detail of this process and how it relates to recent LIS research literature is shown below in sections 2A to 2E.

2A: Knowing the Limits

Property 2A (section 5.4.2 of Chapter Five) finds that the University Librarians must be aware of the library's limitations. These limitations include funding and workforce shortfalls, external cost pressures, stakeholder needs, the fears of library staff, and the need to achieve balance in service provision (section 5.4.2). These considerations add an empirical basis to the theoretical work of Lubas and Wilkinson (2015), who state that a reorganisation can be due to an alignment with the institution's strategic plan; key personnel change; budget cuts; or a poor prior restructure. The concept of knowing the limits also reflects the work of Bresciani (2010, p. 42), who states that the organisation conducts a capacity review to determine its ability to carry out the strategic plan.

A theoretical LIS text by Hernon et al. (2014) addresses this issue for libraries by suggesting that library evaluation includes questioning the areas that are "1.under control of the library; 2.jointly decided by the customer; and 3.decided by the customer" (p.13). Those questions under the control of the library are budget issues, quantitative measurements of library performance, and the economic efficiency and promptness of a service. Those areas under the control of library and customer are the value, reliability, accuracy and the impact of a service upon it stakeholders. The customer alone determines the courtesy and responsiveness of library staff, and the

customer's own level of satisfaction with the service (Hernon et al., 2014). Another LIS text by Hernon, Altman, and Dugan (2015) also discusses the importance of the customer or stakeholder in determining the questions of value and service.

This research significantly extends these works by providing an original empirical contribution about the University Librarians' need to be aware of the factors that hamper effectiveness.

2B: Transforming the Library

This substantive grounded theory finds that participants named two systems thinking tools: soft systems methodology (SSM) (Checkland, 2000, 2012); and design thinking (Luchs, 2015; Meinel & Leifer, 2014). Systems' thinking and SSM in particular, is used by P1 in order to ensure the library's alignment with the university's vision (section 5.4.3 of Chapter Five). SSM has been through several iterations, but Checkland (2000, p. 15) states that the model in common use now is a system of inquiry. This involves the comparison of models of "purposeful activity", using the models as the source of questions about a situation, and "action to improve", where conflicting interests are accommodated (Checkland, 2000, p. 16). Systems thinking encourages staff to consider the library's relationship with the whole institution, enabling them to see how such change can enhance the library's position within the university rather than threatening their own jobs (Senge, 1990; Somerville, 2015).

Design thinking is about "building innovators who can use the design thinking paradigm to transform ideas into reality, to transform organization [sic], and to transform all aspects of life" (Meinel & Leifer, 2014, p. 1). Design thinking involves a process of creating a solution that goes through several iterations, informed by stakeholder feedback (Luchs, 2015, p. 2). This research extends the SSM and design thinking literature by providing an empirical basis in the LIS field.

This research also finds that change in academic libraries is either incremental or transformational (section 5.4.3 of Chapter Five). In order to begin an organisational change, Mandeville-Gamble (2015, p. 7) and Kotter (1996, p. 48) stress the need to overcome resistance by creating a sense of urgency about the need for change throughout all levels of the organisation. The second step is a guiding team of people in leadership who are proven leaders, people with expertise, and those

who are held in respect, who are committed to implementation of the vision (Kotter, 1996, p. 57; Mandeville-Gamble, 2015, p. 7). Mandeville-Gamble (2015, p. 8) also states the importance of consultant advisers who are neutral.

According to Lubas and Wilkinson (2015, p. 22), the first step is to understand the motivations of staff, build their trust, communicate with staff, and listen to their concerns. The findings that some smaller libraries work with staff to overcome their fears of change is similar to the findings of Somerville and Farner (2012), who describe a single case study of library reinvention at the Auraria Library of the University of Colorado Denver, USA. This approach used appreciative inquiry (AI) to allow employees to focus upon an ideal library and work towards achieving that ideal (Somerville & Farner, 2012, p. 11). Appreciative inquiry attempts to change how people think, thereby focusing upon employees' intrinsic motivations (Bushe & Kassam, 2005).

2C: Developing Learning and Knowledge Management Infrastructure

The substantive grounded theory finds that the University Library requires an organisational infrastructure for learning and knowledge management (section 5.4.4 of Chapter Five). According to Bourne (2009), balancing tactical and operational work requires communication within the organisation (Bourne, 2009, p. 19; Bourne & Walker, 2006). Somerville (2015) presents a case study of the Auroria Library at the University of Colorado Denver, where a re-invention of the library created "an enabling infrastructure, a collaborative design initiative advanced reinvention of structures, processes, services, and roles throughout the organization, with emphasis on distinctive social, relational, and interactive aspects of workplace learning" (p.67). These findings also provide empirical support for the theoretical work of Bruce, Hughes, and Somerville (2012), who propose that leaders and managers provide a supportive learning environment for their staff.

This research finds that such communication and collaboration is modelled by the University Librarian and executive leaders who learn from other leaders and researchers in the global LIS community. This finding is similar to the findings of the survey research of Becker (2006b) and the case study research of Becker (2006a), although it extends this Australian context further by using data from US universities as well.

The substantive grounded theory also finds that the University Librarian and other executive library leaders engage in a shared decision-making process. The findings of this research add to several LIS studies that describe the collaborative and shared approach of leaders in decision making (Nutefall & Chadwell, 2012; Somerville & Farner, 2012).

The importance of a flatter organisational structure is highlighted by research participants, showing similarities with the single case studies of Michalak (2012), Jeal (2014) and Wynne et al. (2016). These studies argue the importance of replacing rigid hierarchical structures where staff members are rarely released to work with other departments, with self-directed work teams (Jeal, 2014, p. 290; Michalak, 2012, p. 415). These authors also emphasise the establishment of collaborative cross-functional teams working across both the library and the university. Authors also state the importance of constant communication across the library and staff development and training (Lubas & Wilkinson, 2015, p. 22; Michalak, 2012, p. 417).

2D: Encouraging an Agile Culture

Section 5.4.5 of Chapter Five finds that an agile culture incorporates a team culture and a learning culture. These areas are treated in depth in section 6.4.4 of this chapter.

2E: Making Evidence-Based Decisions

The substantive grounded theory extends much of the literature that discusses evidence-based decision making and how this applies to the LIS field. Evidence-based librarianship (EBL), known later as evidence-based library and information practice (EBLIP) is regarded as important to the LIS field, and much literature exists (Booth & Brice, 2004; Connor, 2007; Eldredge, 2006; Hernon et al., 2014). EBL or EBLIP evolved from the field of evidence-based medicine, gaining popularity in health libraries, education and teacher-librarianship (Gillespie, 2014). Within the LIS field there are many definitions of EBL or EBLIP (Booth & Brice, 2004; Eldredge, 2006). Crumley and Koufogiannakis (2002) provide the following practical definition:

> Evidence-based librarianship (EBL) is a means to improve the profession of librarianship by asking questions as well as finding, critically appraising and incorporating research evidence from library science (and other disciplines)

> into daily practice. It also involves encouraging librarians to conduct high quality qualitative and quantitative research (p. 62).

Bresciani (2010) provides another definition that relates to strategic planning, where evidence-based decision making is the process of gathering data and merging them with other data and institutional goals and vision (Bresciani, 2010, p. 39). This constructivist grounded theory research incorporates both definitions, where the University Librarian gains strategic data from the university's goals and vision (Category 1), as well as from sources that are external to the university. The findings of this study also suggest that the University Librarian pursues a systematic approach to evidence-based decision making.

A survey of recent research shows a general approach to EBLIP that does not specifically relate to the University Librarian's practice of EBLIP. For example, Henry (2015) discusses compiling data through a variety of feedback mechanisms and asserts the importance of continuous analysis of results. Somerville and Brar (2009) describe an evidence-based approach to creating digital library projects, and Somerville (2015) describes evidence–based decision making taking place at Auraria library at the University of Colorado, Denver. A phenomenographic research study by Partridge, Edwards, and Thorpe (2010) explores the EBL experiences of LIS practitioners from a variety of library types. The constructivist grounded theory research of Koufogiannakis (2013, 2015) explores the evidence-based practice of academic librarians but does not examine the practices of the University Librarian.

Therefore, this substantive grounded theory provides an original research contribution in specifying how EBLIP applies to the University Librarian's role in aligning the library's strategy with that of the university.

Original Contribution of this Research

Table 6.2 below provides a clear visualisation of the above literature review, with original contributions of this research highlighted in yellow. This table shows that this research has similar findings to or extends much of the previous literature about library reinvention. The originality of this research is in its contribution of an integrated substantive grounded theory about how the University Librarian continuously reinvents the library. Another original contribution is in the argument that the strategy of reinventing the library includes an agile organisational culture.

Table 6.2
Key Findings of Category 2 and their Relationship to Recent Literature

Key Findings of This Research	Literature Reference	Type of Literature	Relationship to Literature
Category 2: Continuously reinventing the library: Theoretical background	*Bessant et al. (1994)	*Theoretical	*Application to LIS & offers empirical basis
	*Bourne (2009)	*Text (Project management)	* Application to LIS & offers empirical basis
	*Burns (2003)	*Theoretical	*Application to LIS & offers empirical basis
	*Sower and Fair (2012)	*Theoretical	*Application to LIS & offers empirical basis
	*Tellis (2006)	*Theoretical	*Application to LIS & offers empirical basis
Category 2: Continuously reinventing the library: LIS research	*Loftus (2012)	*CI in virtual academic libraries	*Original overall integrated theory
	*Manuel et al. (2010)	*CI in virtual academic libraries	* Original overall integrated theory
	* Shaw and Spink (2009)	* CI in virtual academic libraries	* Original overall integrated theory
	*Mavrinac (2005)	*Transformational change & learning	* Original overall integrated theory
	*Mossop (2013a)	*Transformational change case studies	* Original overall integrated theory
	*Derven and Kendlin (2011)	*Single case study	*Extends - Adds original integrated theory
	*Jeal (2014)	*Single case study	*Extends - Adds original integrated theory
	*Michalak (2012)	*Single case study	*Extends - Adds original integrated theory
	*Nutefall and Chadwell (2012)	*Single case study	*Extends - Adds original integrated theory
	*Somerville (2015)	*Single case study	*Extends - Adds original integrated theory
2A: Knowing the limits	*Bresciani (2010)	*Theoretical (Strategic planning)	*Application to LIS context & offers empirical basis
	*Hernon et al. (2014)	* LIS text	*Provides empirical basis
	*Hernon et al. (2015)	* LIS text	* Provides broader empirical basis
	*Lubas and Wilkinson (2015)	*LIS text	* Application to LIS context & offers empirical basis
2B: Transforming the library: Systems thinking	*Senge (1990)	*Theoretical	*Similar findings
	*Somerville (2015)	*Single case study	*Similar findings

Key Findings of This Research	Literature Reference	Type of Literature	Relationship to Literature
2B: Soft systems methodology (SSM)	*Checkland (2000) *Checkland (2012) *Somerville (2015)	*Theoretical *Theoretical *Single case study	* Application to LIS & offers empirical basis * Application to LIS & offers empirical basis *Extends - broader empirical basis
2B: Design thinking	*Luchs (2015) *Meinel and Leifer (2014)	*Theoretical *Theoretical	* Application to LIS & offers empirical basis * Application to LIS & offers empirical basis
2B: Achieving change (Change management)	*Kotter (1996) *Mandeville-Gamble (2015)	*Text (Change management) *LIS text	*Application to LIS & offers empirical basis *Extends & offers empirical basis
2B: Building staff trust	*Lubas and Wilkinson (2015)	*LIS text	*Extends by providing empirical basis
2B: Appreciative inquiry (AI)	*Bushe and Kassam (2005) *Somerville and Farner (2012)	*Meta case analysis *Single case study	* Application to LIS & offers empirical basis *Similar findings
2C: Developing learning and KM infrastructure	*Bourne (2009) *Bourne and Walker (2006) *Bruce et al. (2012) *Somerville (2015)	*Text (Project management) *Multiple case study *Theoretical *Single case study	* Application to LIS context * Application to LIS context *Provides empirical basis *Similar findings
2C: Leader as learner	*Marsick and Watkins (1999) *Senge (1990) *Becker (2006b)	*Text (learning organisation) *Text (Learning organisation) *Survey	* Application to LIS & offers empirical basis * Application to LIS & offers empirical basis *Similar findings
2C: Collaborative leadership structure	*Nutefall and Chadwell (2012) *Somerville and Farner (2012)	*Single case study *Single case study	*Similar findings *Similar findings
2C: Team infrastructure	*Derven and Kendlin (2011) *Jeal (2014) *Lubas and Wilkinson (2015) *Michalak (2012) *Wynne et al. (2016)	*Single case study *Single case study *LIS text *Single case study *Single case study	*Similar findings *Similar findings *Similar findings *Similar findings *Similar findings
2C: Communication, development, training	*Lubas and Wilkinson (2015) *Michalak (2012)	*LIS text *Single case study	*Adds empirical basis *Similar findings
2D: Encouraging an agile culture	Discussed in 6.4.4		*Original contribution

Key Findings of This Research	Literature Reference	Type of Literature	Relationship to Literature
2E: Making evidence-based decisions	*Bresciani (2010) *Connor (2007)	*Theoretical *Case studies	*Extends to LIS *Extends - Adds original theory about EBLIP practice of University Librarian
	*Derven and Kendlin (2011)	*Single case study about print resource cancellation project	*Extends - Adds original theory about EBLIP practice of University Librarian
	*Eldredge (2006)	*Narrative literature review	*Extends - Adds original theory about EBLIP practice of University Librarian
	*Henry (2015)	*Theoretical	*Extends - Adds original theory about EBLIP practice of University Librarian
	*Hernon et al. (2014)	*LIS Text	*Extends - Adds original theory about EBLIP practice of University Librarian
	*Somerville and Brar (2009)	*Single case study	*Extends - Adds original theory about EBLIP practice of University Librarian
	*Somerville (2015)	*Single case study	*Extends - Adds original theory about EBLIP practice of University Librarian
	*Zaugg (2015)	*Opinion	*Extends - Adds original theory about EBLIP practice of University Librarian

6.4.3 Category 3: Engaging with Stakeholders

Section 5.5 of Chapter Five presents one the main findings of the substantive grounded theory as the importance of the academic library in engaging with stakeholders. According to Bourne (2009) engagement is "practices, processes and actions that an organisation must perform to involve stakeholders in any organisational activity to secure their involvement and commitment, or reduce their indifference or hostility" (p. 93).

Theoretical Literature

The substantive grounded theory finds that the participants regard engagement with stakeholders as very important, and this reflects the argument of much service organisation literature that innovation in a service organisation requires close engagement with customers (Agarwal et al., 2015; Carbonell & Rodriguez-Escudero,

2014; Kindström et al., 2013; Ordanini & Parasuraman, 2011; Wang et al., 2016). This assertion derives from the body of research of Parasuraman (2004, p. 47), who argued that customers have a zone of tolerance for service, which falls between a desired and a minimum level of service. If the service falls below the minimum level, customers will look elsewhere for their service needs to be met (Parasuraman, 2004, p. 47).

The findings of this research also reflect stakeholder theory (Freeman, 2010; Friedman & Miles, 2006; Philips, 2011) which was developed by Freeman (1984) and derives from strategic management literature. According to Freeman, Wicks, and Parmar (2004) stakeholder theory encourages managers to:

> Articulate the shared sense of the value they create, and what brings its core stakeholders together…Second, stakeholder theory asks, what responsibility does management have to stakeholders? (p.364)

The findings of this substantive grounded theory can be explained through theories that have developed stakeholder theory further, such as stakeholder relationship management (Bourne, 2009) or customer relationship management (Kumar & Reinartz, 2011; Peelen & Beltman, 2013). According to the stakeholder relationship management theory of Bourne (2009), success in managing stakeholder relationships during project management requires a "long-term commitment to a structured process focused on:

- Identifying stakeholders;
- Understanding their expectations;
- Managing those expectations;
- Monitoring the effectiveness of stakeholder engagement activities;
- Continuous review of the stakeholder community" (p.4)

LIS Literature

Literature in the LIS domain rarely uses terms such as "stakeholder relationship management", or "customer relationship management". Rather, much of the LIS literature relates to the similar, but narrower concept of service quality, which involves reducing the gap between the customer's expectation of service and their perception of quality of the service (Hernon et al., 2015; Quinn, 1997). Service quality has a narrower scope than stakeholder theory or stakeholder relationship

management because it tends to relate to services to library clients rather than the entire range of stakeholders.

The domain of LIS is replete with literature that discusses the individual ways in which academic libraries maintain service quality, or engage with their stakeholders, and these are cited below in sections 3A to 3E below. This research extends the findings of these studies by adding an integrated theory that brings these elements together.

In closer relationship to this research, the theoretical paper of Yeh and Walter (2016, p. 799) explores various proposals that customer participation and building partnerships with various stakeholders in the academic library positively relates to service innovation. However, the preliminary nature of this paper does not provide any empirical evidence for these proposals.

The grounded theory research of Nguyen, Partridge, and Edwards (2012) and Nguyen (2014, 2015) produces a holistic approach to user participation or engagement, but does not explore the actions of the University Librarian in ensuring the library is engaging with its stakeholders. Therefore, this substantive grounded theory is unique in determining the process and strategies that University Librarians use to ensure their libraries engage with their stakeholders (section 5.5 of Chapter Five). The detail of this process and how it relates to recent LIS research literature is shown in sections 3A to 3E below.

3A: Knowing the Stakeholders and 3B: Developing an Engagement Framework

Section 5.5.1 of Chapter Five finds that there is a process of engaging with stakeholders. This finding reflects Bourne's (2016) guidelines for stakeholder engagement as quoted above. Henry (2015) also provides guidelines and asserts the importance of defining the target audience in any targeted marketing or engagement strategy, although this work has no empirical basis. A conceptual paper by Nguyen et al. (2012) and grounded theory research by Nguyen (2014, 2015) produce a participatory library model that explores the experience of library users and librarians of the participatory library. The participatory library model does not explore the library's engagement strategy with the entire range of stakeholders and it ignores the role of the University Librarian in setting such strategy. Therefore, this research is

different from the participatory library model in its focus upon the agency of the University Librarian in setting strategy and organisational culture.

3C: Encouraging an Engaged Library Culture

An engagement strategy can be hindered by the attitude of stakeholders toward the organisation. The findings of sections 5.5 and 5.6 of Chapter Five discuss the importance of a customer-focused culture (sections 5.5.4 and 5.6.4) and a collaborative team culture (sections 5.5.4 and 5.6.6). These findings have similarity to the work of Bourne (2009, p. 96), who argues that the attitude of stakeholders toward an organisation is shaped by a number of factors including the culture of the organisation, their identification with the values and purpose of the organisation's activity, and the personal attributes of those in the organisation. Here, the attitude of stakeholders becomes complex and, to some extent, emotional (Otero-Boisvert, 2015). The concept of engaged culture is presented in detail in section 6.4.4. This research extends the maturity model of stakeholder relationship management of Bourne (2009) to the University Library domain.

3D: Engaging with Internal University Stakeholders

Students

The substantive grounded theory finds that academic libraries use qualitative and quantitative research methods to investigate the requirements of stakeholders and the efficacy of the library's services (sections 5.5.5 and 5.7.3 of Chapter Five). Esson, Stevenson, Gildea, and Roberts (2012, p. 470) state that surveys are the predominant means of gathering client data for libraries. Case studies about the use of survey instruments such as LIBQUAL™ and LIBQUAL+™ (Daneshgar & Parirokh, 2012; Stoffle & Cuillier, 2010; Wynne et al., 2016) and SERVQUAL™ (Kaur, 2010; Zahid, 2011) abound. A number of studies also report on the use of qualitative methods such as focus groups as a means of investigating problem areas in order to make improvements (Appleton et al., 2011; Esson et al., 2012; Wynne et al., 2016).

The substantive grounded theory (sections 5.3.4 and 5.5.5) also supports and builds upon the findings of Robertson (2015, p. 498) that academic libraries are perceived as contributing to student success and to the teaching and learning endeavour of the university. Denda (2015) finds that academic libraries are engaging with students through multi literacies classes. The research of Denda and Hunter

(2016) finds that the employment of undergraduate students enables the library to relate well to its student community, and it can enhance its operations when the job is related to their field of study.

The substantive grounded theory also finds that academic libraries are now using their space as a means of engaging with their students and administrative staff and external stakeholders (sections 5.3.4 and 5.5.6). This adds to a number of recent studies (Robertson, 2015; Wynne et al., 2016), although Gwyer (2015, p. 280) indicates there are gaps in the systematic evaluation of library space. The *NMC Horizon Report: 2015 Library Edition* (Johnson et al., 2015) reports on the number of creative additions libraries are adding to their spaces, and Shapiro (2016) provides a literature review of the ways in which academic libraries are using their spaces. The concept of the library as a cultural hub for the university, which was noted by a number of participants, reflects the research of Robertson (2015).

The finding that academic libraries are using social media as networking tools to engage with stakeholders (section 5.5.6) are also similar to findings in recent research literature (Chatten & Roughley, 2016; Delaney & Bates, 2015; Saunders, 2015; Stoffle & Cuillier, 2010).

Academics and Researchers

The importance of the library's collaborative partnership with academics and researchers is emphasised in the substantive grounded theory (sections 5.3.4 and 5.5.5 of Chapter Five) and it is similar to previous research findings that academic libraries need to become partners in learning (Delaney & Bates, 2015; Meulemans & Carr, 2013; Wynne et al., 2016). A major reason for collaborative partnerships is that they reduce the possibility of failure, thus encouraging more creativity and innovation (Bieraugel, 2015).

The *Ithaka S+R US Library Survey 2013* (Long & Schonfeld, 2014, p. 54) notes the importance of collaboration. This trend is also noted by Saunders (2015, p. 288), whose research noted that a large majority of libraries are focusing upon collaboration with individuals and departments across the campus. Wynne et al. (2016, p. 10) describes the library's active contribution to committees and decision-making meetings across the areas of learning, research and institutional planning. Robertson (2015, p. 499) found that university provosts in Canada perceived

academic libraries as “ahead of the curve” in terms of collaborative activity within the university.

The substantive grounded theory also finds that academic libraries are collaborating with researchers. This reflects other research that explains how university libraries are collaborating with faculties in their research endeavours (Hoppenfeld & Malafi, 2015; Tiffen & England, 2011). The trend towards collaboration is also reported by Gwyer (2015, p. 281), and is noted in the research of Robertson (2015). Several authors report the ways in which academic libraries are using the institutional repository as a publishing tool (Shapiro, 2016), measure research impact (Galligan & Dyas-Correia, 2013; Johnson et al., 2015) and disseminate the research capabilities of the university staff. Johnson et al. (2015) emphasise that libraries can assist researchers to update material as they move to publish manuscripts. Such engagement also involves collaborating with researchers to provide metadata about their research and providing storage for their datasets (Johnson et al., 2015, p. 14).

University Administrators

This study finds that University Librarians regard engagement with high level administrators, attaining their high regard, and of gaining their support as crucial to their success in maintaining their relevance (sections 5.5.5 and 5.7.7). These findings extend the research of various authors (Otero-Boisvert, 2015; Robertson, 2015; Stoffle & Cuillier, 2010). The findings in this study echo the ethnographic research of Otero-Boisvert (2015, p. 268), who finds that the leader who persists in advocacy for new projects over a number of years and manages the relationships associated with the project well is likely to be successful in procuring funding.

Therefore, it would appear that the ability to manage interpersonal relationships with administrators and colleagues, demonstrate good financial management, commitment to university vision and reciprocity is crucial in gaining the goodwill of administrators (Otero-Boisvert, 2015, p. 269). Overall Otero-Boisvert (2015, p. 270) argues that the successful University Librarian must understand the wider higher education culture, with a greater outward looking focus to the library’s role on campus, and finally must have a flair for managing relationships which includes being a team player with a willingness to sacrifice some projects for the good of the university.

3E: Engaging with Stakeholders outside the University

Another significant finding of this substantive grounded theory is the importance of the library's engagement with the LIS sector (section 5.5.6). This finding adds to the research of Robertson (2015) by exploring the perceptions of university librarians. Gwyer (2015) also identifies library collaboration and networking amongst libraries as a strength that libraries are increasingly required to call upon in order to increase access to digital resources, research outputs and work with publishers.

The substantive grounded theory also finds that University Librarians are engaging with international university libraries and the international LIS sector, demonstrating similar findings to several LIS works (Becker, 2006a, 2006b; Somerville, Cooper, Torhell, & Hashert, 2015). Robertson (2015, p. 505) investigated the perceptions of provosts, or academic vice-presidents in Canadian research-intensive universities, finding that the provosts note the reputation and international standing that the University Librarian holds.

This research also finds that academic libraries are increasingly engaging with external stakeholders (section 5.5.6), echoing some prior studies that report similar findings. For example, a literature review by Shapiro (2016, p. 35) notes that libraries are judged by the donor funding and government grants that they attract. Survey research of 21 American outreach librarians' listed outreach activities, but this study was not exhaustive, and the sample size was small (Dennis, 2012). A single case study by Sidorko and Yang (2011) discussed the initiatives of the University of Hong Kong in reaching out to its wider community. Saunders (2015, p. 288) also noted the strategic directions of academic libraries to engage with communities through schools or museums in a content analysis of strategic plans.

Original Contribution of this Research

A number of studies provide an overview of the measures taken to engage with academic library stakeholders (Saunders, 2015; Shapiro, 2016; Stoffle & Cuillier, 2010; Wynne et al., 2016). These studies do not refer to the element of an engaged culture. The research of Otero-Boisvert (2015) studies the importance of the University Librarian's interpersonal relationships and attitudes in gaining funding for the library, and therefore this research extends these findings.

Table 6.3 below demonstrates how the key findings of this substantive grounded theory relate to previous literature. The highlighted sections of the table clearly show that the theoretical model of academic library engagement is an original contribution in the domain of LIS research that extends the work of other authors. This research is original to the domain of academic library management because it provides an original substantive grounded theory (Chapter Five, section 5.5) and theoretical model (Figure 5.3) of academic library engagement with stakeholders. This substantive grounded theory will assist academic libraries to strategically plan stakeholder engagement.

Table 6.3

Key Findings of Category 3 and their Relationship to Recent Literature

Key Findings of this Research	Literature Reference	Type of Literature	Relationship to literature
Category 3: Engaging with stakeholders: Theoretical background	*Agarwal et al. (2015)	*Theoretical	*Application to LIS & offers empirical basis
	*Bourne (2009)	*Text (Project management)	* Application to LIS & offers empirical basis
	*Carbonell and Rodriguez-Escudero (2014)	*Survey	*Application to LIS
	*Henry (2015)	*LIS text	* Application to LIS
	*Kindström et al. (2013)	*Multiple case study	* Application to LIS & offers empirical basis
	*Kumar and Reinartz (2011)	*Text (Management)	* Application to LIS & offers empirical basis
	*Ordanini and Parasuraman (2011)	*Survey	* Application to LIS
	*Parasuraman (2004)	*Theoretical	* Application to LIS & offers empirical basis
	*Peelen and Beltman (2013)	*Text	* Application to LIS & offers empirical basis
	*Wang et al. (2016)	*Survey	* Application to LIS
Category 3: Engaging with stakeholders: LIS Literature	*Hernon et al. (2015)	*LIS Text	*Original theory with empirical basis
	*Nguyen et al. (2012)	*Literature review	*Extends with experience of University Librarian Original theory
	*Nguyen (2014)	*Grounded theory	*Extends with experience of University Librarian Original Theory
	*Nguyen (2015)	*Grounded theory	*Extends with experience of University Librarian Original Theory
	*Quinn (1997)	*Literature review	*Original theory with empirical basis
	*Yeh and Walter (2016)	*Literature review	*Provides original theory with empirical basis

Key Findings of this Research	Literature Reference	Type of Literature	Relationship to literature
Property 3A and 3B: Knowing the stakeholders and Developing an engagement framework	*Bourne (2009) *Bourne and Walker (2006) *Henry (2015)	*Text (Project management) *Two case studies *LIS Text	* Application to LIS and provides empirical basis * Application to LIS *Provides empirical basis
Property 3C: Encouraging an engaged library culture	*Bourne (2009) *Otero-Boisvert (2015)	*Text (Project management) *Ethnography	*Extends to library context *Extends to whole library – Original contribution of integrated theory
Property 3D: Engaging with internal university stakeholders: Students : Surveys	*Daneshgar and Parirokh (2012) *Kaur (2010) *Stoffle and Cuillier (2010) *Wynne et al. (2016) *Zahid (2011)	*Case study *Case study *Descriptive case study *Case study *Case study	*Similar findings *Similar findings * Similar findings * Similar findings * Similar findings
Focus groups	*Appleton et al. (2011) *Esson et al. (2012) *Wynne et al. (2016)	*Multiple case studies *Case study *Case study	* Similar findings * Similar findings * Similar findings
Student teaching and learning	*Denda (2015) *Robertson (2015)	*Case study *Interviews	* Similar findings * Similar findings
Student employment	*Denda and Hunter (2016)	*Case study	* Similar findings
Using space for engagement	*Johnson et al. (2015) *Robertson (2015) *Shapiro (2016) *Wynne et al. (2016)	*Trends report *Interviews *Literature review *Case study	* Similar findings * Similar findings *Extends with empirical data * Similar findings
Using social media for engagement	*Chatten and Roughley (2016) *Delaney and Bates (2015) *Saunders (2015) *Stoffle and Cuillier (2010)	*Case study *Literature review *Content analysis *Case study	* Similar findings * Similar findings * Similar findings * Similar findings
Library engagement through partnership with academics and researchers: Teaching and learning	*Bieraugel (2015) *Delaney and Bates (2015) *Long and Schonfeld (2014) *Meulemans and Carr (2013) *Robertson (2015) *Saunders (2015) *Wynne et al. (2016) *Galligan and Dyas-Correia (2013) *Gwyer (2015)	*Conceptual *Literature review *Survey report *Descriptive case study *Interviews *Content analysis *Case study *Research article *Mixed methods	* Similar findings * Similar findings * Similar findings * Similar findings * Similar findings * Similar findings * Similar findings * Similar findings *Provides empirical basis
Research collaboration	*Hoppenfeld and Malafi (2015) *Johnson et al. (2015) *Shapiro (2016) *Tiffen and England (2011)	*Mixed methods *Trends report *Literature review *Action research	* Similar findings * Similar findings *Extends with empirical data * Similar findings

Key Findings of this Research	Literature Reference	Type of Literature	Relationship to literature
Library engagement with university administrators	*Otero-Boisvert (2015)	*Ethnography	*Extends with experience of University Librarian
	*Robertson (2015)	*Interviews	*Extends with experience of University Librarian
	*Stoffle and Cuillier (2010)	*Descriptive case study	*Extends with experience of University Librarian
Property 3E: Library engagement with external stakeholders: Library sector	*Becker (2006a) *Becker (2006b) *Gwyer (2015) *Robertson (2015)	*Two case studies *Survey *Mixed methods *Interviews	*Similar findings *Similar findings *Similar findings *Extends with experience of University Librarian
	*Somerville et al. (2015)	*Single case study	*Similar findings
External community	*Dennis (2012)	*Survey	*Extends with experience of University Librarian
	*Saunders (2015)	*Content analysis	*Extends with experience of University Librarian
	*Shapiro (2016)	*Literature review	*Extends with experience of University Librarian
	*Sidorko and Yang (2011)	*Descriptive case study	*Extends with experience of University Librarian

6.4.4 Category 4: Building an Agile and Engaged Culture

Category 4 (section 5.6 of Chapter Five) of the substantive grounded theory finds that in order to ensure the library's relevance, the University Librarian builds an agile and engaged organisational culture.

Theoretical Literature

The substantive grounded theory finds that university libraries require an organisational culture that is agile and engaged with stakeholders. Organisational agility, according to Nold and Michel (2016) is "the ability to make countless small adaptations in response to non-stop change that result in changing the fundamental building blocks of the organization" (p.342). The findings that the academic library requires an agile culture reflects the work of Tellis (2006) who states that an organisation that thrives in the face of disruptive technology requires an internal culture that is willing to take risks and is competitive.

Stakeholder engagement, according to Sloan (2009), is "the process of involving individuals and groups that affect or are affected by the activities of the company" (p. 26). Bourne (2009, p. 5) calls this stakeholder management and states that the continuous nature of the process of stakeholder management requires that stakeholder management becomes embedded in the organisational culture. The necessity of a culture that is engaged with stakeholders mirrors Bourne's (2009) assertion that the culture of the organisation is important in ensuring the engagement of stakeholders.

LIS Literature

The findings of this substantive grounded theory significantly extend the small amount of literature about agile and engaged culture in academic libraries. Some recent practitioner literature exists that discusses the academic library workplace culture (Blessinger & Hrycaj, 2013; Budd, 2012). A recent study by Mierke and Williamson (2017) proposes a framework for cultural change. However, this framework is based on a single case study. Several single case studies of academic libraries have focused upon organisational culture that encourages agility or similar concepts such as innovation or a change orientation (Jeal, 2014; Leong & Anderson, 2012; Michalak, 2012; Somerville, 2015). Casey (2011) produces similar findings in discussing the necessity of a culture of change in academic libraries. Agile culture in academic libraries is addressed in the survey research of Maloney, Antelman, Arlitsch, and Butler (2010), who found that a strong *adhocracy* culture (Cameron & Quinn, 2011), where the library is continuously making small adjustments is necessary (see section 6.4.7). The substantive grounded theory finds that the participants encourage agility through both an adhocracy and clan culture (section 5.6.6 of Chapter Five). The importance and impact of agile culture is discussed further in section 6.4.7.

The substantive grounded theory also finds the necessity of an engaged culture involving a customer focus. Michalak (2012) describes, in a case study, how the University of North Carolina (UNC) reorganised the library to become more "outward-facing" and collaborative.

This substantive grounded theory is an original contribution to the literature because it provides an understanding of the processes the University Librarian

initiates in building an agile and engaged culture. These processes and their relationship to the relevant literature are detailed below in sections 4B to 4F.

4B: Future Proofing the Workforce

Section 5.6.3 of Chapter Five finds that the workforce of the future requires the capabilities of flexibility, agility and learning. The findings also include the necessity of the leader's role in creating cultural change. If the library's vision includes these capabilities, then the workforce must be willing to participate in the vision (Bourne, 2009, p. 3). Mandeville-Gamble (2015, p. 2) argues that a vision that is communicated in a way that will facilitate buy-in by staff will shape the structure and culture of the library and retain the top performers. Therefore, the organisational leader must create and communicate a message that is meaningful to staff, providing purpose and direction (Mandeville-Gamble, 2015, p. 2).

In order to support and ensure commitment to the vision, Leong and Anderson (2012, p. 493) focus upon leadership development that ensures leaders are supporting the vision of an innovative library culture. Agility is also addressed by encouraging leadership at all levels of the library (Michalak, 2012, p. 420). This includes allowing staff to initiate change, make suggestions, and seek professional development opportunities. Several authors also suggest recruiting staff that are aligned to the organisational vision of the library (Jeal, 2014, p. 288; Mandeville-Gamble, 2015, p. 8). Moreover Schein (2010) and Goldman and Casey (2010, p. 122) suggest the employment of staff who are capable of strategic thinking, and the findings of this research provides empirical basis to this view (section 5.3.4).

4C: Building a Customer Focus

This research produces similar findings to several studies that emphasise engagement with stakeholders or a customer focus. Case studies of the Undergraduate Library at the University of Illinois at Urbana-Champaign (Mestre & LeCrone, 2015) and the University of Arizona (Stoffle & Cuillier, 2010) emphasise customer service. Michalak (2012, p. 414) explains that University of North Carolina (UNC) has an outward focused culture, with librarians spending less time in the physical library, and the library engaging with stakeholders online.

4D: Building a Learning Culture

The substantive grounded theory finds that it is necessary to build a learning culture (section 5.6.5), providing empirical basis to the statement of Mandeville-Gamble (2015) that "a key predictor of successful innovative organisations is their ability to inculcate a culture of learning" (p.9). A culture of continuous learning is therefore part of the strategic planning of many academic libraries. Saunders (2015, p. 289) finds that academic library strategic plans include the goal of continuous learning. Michalak (2012) states the importance of continuous training to counter "change fatigue" (p.417).

This substantive grounded theory extends the previous research of other authors. The finding that University Librarians rely heavily upon professional networks such as CAUL or academic networks reflects the work of Cervone (2007), who finds that the larger the size of the network, the more receptive librarians are to innovation. Moreover several studies demonstrate that academic libraries encourage staff learning through cross unit training of staff and professional development (Leong & Anderson, 2012; Stoffle & Cuillier, 2010). Somerville (2015, p. 70) describes an organisational culture of evidence-based decision-making at the Auraria Library of the University of Colorado Denver.

4E: Building a Team Culture

This research finds that agility is enabled by a team culture that empowers staff; is egalitarian, communicative and collaborative; and is working together towards a common vision (section 5.6.6). These findings reflect other LIS research findings. Shepstone and Currie (2013) cite three case studies of Canadian academic libraries that showed a preferred library culture of adhocracy that "encourages and fosters independent action, innovation, and risk taking" (p.25). Jeal (2014, p. 286) also supports the notion of an open culture where experimentation and risk-taking are allowed. These studies also revealed a preference to continue a *CLAN* culture that "emphasises a people and relationship focus, cohesion, participation and belonging, teamwork and employee development" (Shepstone & Currie, 2013, p. 23). Similarly, Somerville (2015, p. 72) describes a participatory approach to workplace redesign at Auraria library, where staff members were invited to describe preferred communication styles and decision-making practices.

Michalak (2012, p. 420) stresses that agility is addressed by encouraging leadership at all levels. This view is supported by several authors, who argue that self-functioning teams and working groups make the library adaptable (Jeal, 2014; Leong & Anderson, 2012; Mandeville-Gamble, 2015; Stoffle & Cuillier, 2010). Michalak (2012) points out that giving teams of staff responsibility creates a sense of shared responsibility and ownership of tasks, with a collaborative focus upon the dispersal of funds. Therefore, according to Michalak (2012, p. 415), trust levels between leaders and staff increase, along with staff members' personal satisfaction with accomplishments.

Nevertheless, a danger is the possibility of groupthink, where social pressures to conform to group norms and maintain friendly group relationships suppress independent critical thinking amongst members, leading to poor, irrational and morally unsound decision making (Janis, 1982, p. 7; Murray-Webster, 2016, p. 148). Here, the leader must take a number of steps to avoid groupthink including considering alternatives, dividing the group into two, and using outside experts (Murray-Webster, 2016, p. 150).

4F: Building a Creative Culture

This substantive grounded theory finds that some of the participants have systems in place that encourage new ideas and innovation (section 5.6.7 of Chapter Five). Mumford, Hester, and Robledo (2012) define creativity as "the production of original, high quality, and elegant problem solutions" (p.4). According to these authors, creativity is different to innovation, which is "the crafting, often reworking, of creative problem solutions into new products, processes, or services" (Mumford et al., 2012, p. 5). The LIS research of Maloney et al. (2010, p. 337) finds that an organisation that can adapt to constant change will have leaders who are innovative and creative thinkers.

Much of the recent LIS literature focuses upon innovation rather than creativity (Brundy, 2015; Jantz, 2012b, 2013; Leong & Anderson, 2012). However, Walton (2008a) suggests the need for creativity in innovation in an opinion paper. A recent survey of research libraries in the U.S. by Jantz (2015) finds that libraries need to develop a creative and innovative culture. Mandeville-Gamble (2015, p. 10) states that allowing staff to play with new technologies or ideas that are related to work activity engenders creativity and increased productivity.

Original Contribution of this Research

Table 6.4 below demonstrates that many of the individual concepts described in the substantive grounded theory are similar to the findings of other research. However, the concept of creativity in academic libraries is under-represented in research literature. The highlighted sections of the table show that this research is original because it provides an overall substantive grounded theory (Chapter Five, section 5.6) and a theoretical model (Figure 5.4) about how University Librarians are building an agile and engaged culture.

Table 6.4

Key Findings of Category 4 and their Relationship to Recent Literature

Key findings of this research	Literature Reference	Type of Literature	Relationship to Literature
Category 4: Building and agile and engaged culture: Theoretical literature	*Blessinger and Hrycaj (2013)	*LIS text	*Provides empirical basis
	*Bourne (2009)	*Text (Project management)	*Application to LIS & offers empirical basis
	*Budd (2012)	* LIS text	*Provides empirical basis
	*Mandeville-Gamble (2015)	*LIS text	*Provides empirical basis
	*Nold and Michel (2016)	*Organisational culture	*Application to LIS
	*Sloan (2009)	*Corporate citizenship	*Application to LIS
Category 4: Building and agile and engaged culture: LIS research	*Casey (2011)	*Multiple case study	*Extends with Original integrated theory
	*Jeal (2014)	*Single case study	*Extends with Original integrated theory
	*Leong and Anderson (2012)	*Single case study	*Extends with Original integrated theory
	*Maloney et al. (2010)	*Survey	*Extends with Original integrated theory
	*Michalak (2012)	*Single case study	* Extends with Original integrated theory
	*Mierke and Williamson (2017)	*Single case study	* Extends with Original integrated theory
	*Somerville (2015)	*Single case study	* Extends with Original integrated theory
4B: Future proofing the workforce: Vision	*Bourne (2009)	*Text (Project management)	*Extends to LIS & offers empirical basis
	*Goldman and Casey (2010)	*Qualitative interviews	*Extends to LIS
	*Mandeville-Gamble (2015)	*LIS text	*Provides empirical basis
	*Schein (2010)	*Text (Organisational behaviour)	*Extends to LIS & offers empirical basis

Key findings of this research	Literature Reference	Type of Literature	Relationship to Literature
4B:Leadership capabilities at all levels	*Jeal (2014) *Leong and Anderson (2012) *Mandeville-Gamble (2015) *Michalak (2012)	*Single case study *Single case study *LIS text *Single case study	*Similar findings *Similar findings *Provides empirical basis *Similar findings
4C: Building a customer focus	*Mestre and LeCrone (2015) *Michalak (2012) *Stoffle and Cuillier (2010)	*Single case study *Single case study *Single case study	*Similar findings *Similar findings *Similar findings
4D: Building a learning culture:	*Mandeville-Gamble (2015) *Michalak (2012) *Saunders (2015)	*LIS text *Single case study *Content analysis	*Provides empirical basis *Similar findings *Similar findings
Leaders use professional/learning networks	*Cervone (2007)	*Survey	*Similar findings
Staff training/development	*Leong and Anderson (2012) *Stoffle and Cuillier (2010)	*Single case study *Single case study	*Similar findings *Similar findings
Evidence-based decision making	*Somerville (2015)	*Single case study	*Similar findings
4E: Building a team culture: Leadership at all levels	*Jeal (2014) *Leong and Anderson (2012) *Mandeville-Gamble (2015) *Michalak (2012) *Shepstone and Currie (2013) *Stoffle and Cuillier (2010)	*Single case study *Single case study *LIS text *Single case study *Multiple case studies *Single case study	*Similar findings *Similar findings *Provides empirical basis *Similar findings *Similar findings *Similar findings
Encouraging open communication	*Jeal (2014) *Somerville (2015)	* Single case study *Single case study	*Similar findings *Similar findings
4F: Building a creative culture	*Jantz (2015) *Maloney et al. (2010) *Mandeville-Gamble (2015) *Mumford et al. (2012) *Walton (2008a)	*Survey *Survey *LIS text *Text (Organisational creativity) *Opinion	*Similar findings *Similar findings *Provides empirical basis *Application to LIS & offers empirical basis *Provides empirical basis

6.4.5 Category 5: Demonstrating the Library's Value

Category 5 (section 5.7 of Chapter Five) of the substantive grounded theory finds that the University Librarian ensures the library is demonstrating its value to stakeholders.

Theoretical Literature

According to Bourne (2009, p. 11) the organisation's success is measured by reporting financial aspects as well as less tangible facets such as how well stakeholder expectations are met. Reporting mechanisms allow the library to highlight the delivery of value, thus imparting management confidence in the ability of the organisation to deliver (Bourne, 2009, p. 20). Albert (2014, p. 634) states that communicating and engaging with stakeholders about the value of the library to "stakeholder success" is essential.

LIS Literature

While there is much LIS literature concerning the demonstration of library value, much of it is theoretical, literature review, or opinion, with little empirical basis (Albert, 2014; Hernon et al., 2014; Oakleaf, 2010). Indeed, Saunders'(2016, p. 10) content analysis of university libraries' strategic plans shows that measures of demonstrating the library's value are not well documented or understood in these strategic plans.

5A: Struggling to Demonstrate the Library's Value

The substantive grounded theory finds that many of the University Librarians struggled to demonstrate the library's value to administrators (section 5.7.2 of Chapter Five). This finding supports two other authors' research findings. Saunders' (2016) content analysis of American university library strategic plans finds that the library plans showed little alignment to the university's mission, with little reference to student retention or assessment of their own instruction sessions. Robertson (2015) investigates the measures of success that provosts use in evaluating their libraries. The most common response from Provosts was usage data (Robertson, 2015, p. 505) and satisfaction data was also mentioned. Interestingly, while they considered impact data as important, they were unable to cite any, and considered meaningful impact data was an "unattainable ideal" (Robertson, 2015, p. 505).

5B: Using Evidence-Based Measurements of Value

Section 5.7.3 of Chapter Five finds that University Librarians use quantitative, qualitative and benchmarking evidence to demonstrate the library's value. Much of the recent literature relating to evidence-based decision making has been addressed in section 6.4.2.

Bresciani (2010, p. 43) emphasises the importance of devising success indicators in strategic planning. These indicators relate to the goals that are specified in the strategic plan. Hernon et al. (2014) provide a useful classification of the various means of measuring and evaluating the library and its services that includes library metrics; satisfaction; service quality; return on investment (ROI). Franklin (2009) explores how the library matches specific stakeholder needs and measures the achievement of its goals in improving scores on information literacy or increasing the number of items in the institutional repository.

Reid (2011) discusses the effectiveness of the balanced scorecard (BSC) in academic libraries. The BSC includes financial and non-financial performance measures to measure business strategy: *financial*, *customer, internal business process,* and *learning and growth* (Kaplan & Norton, 1996). Reid (2011, p. 93) suggests that it can enable the library to measure its value to the university. Saunders (2016) discusses some means of demonstrating the library's value such as targets for collaboration with faculty, targets for results on information literacy, and raising grants.

This substantive grounded theory extends these works by providing an original empirical contribution about the University Librarians' use of evidence-based measurements in order to demonstrate the library's value to stakeholders.

5C: Demonstrating the Library's Value

Section 5.7.4 of Chapter Five finds that University Librarians demonstrate the library's value by gaining political support, developing a good reputation for the library, demonstrating leadership within the university and establishing high visibility (section 5.7.4 of Chapter Five).

These results extend the findings of a number of studies. Oakleaf (2011, p. 11) states that the library's value is in how well it achieves the university's mission and outcomes. Oakleaf (2010) identifies areas in which the library can assess its value to

the students: enrolment, retention, success, achievement, learning, experience, attitude and perception of quality. She also states the library can assess its contribution to research productivity, grants and teaching, and to community engagement, recruitment of staff and to the university's reputation.

Wynne et al. (2016) report in their single descriptive case study the University of Leicester library's increased influence across the university by adopting a marketing or branding approach, through collaborations, and through "repositioning by doing" (p.10). Robertson (2015) finds that some provosts of Canadian universities mentioned informal feedback in their assessment of the library's value. Other factors the provosts mentioned included the external reputation of the library, the national and international reputations of their library directors and whether the library is impacting the university strategic plan.

The work of Otero-Boisvert (2015) discusses the important role of the University Librarian in demonstrating the library's value. Otero-Boisvert (2015, p. 265) finds that the University Librarian achieves the respect of the university by managing relationships upward with administrators and also with faculty, staff and students. The support of key administrators for the library studied in this research was "built on years of maintaining excellent relationships with key administrators and colleagues, building a history of credibility as good fiscal managers, demonstrating a commitment to the university's overall mission and engaging in reciprocal acts as needed" (Otero-Boisvert, 2015, p. 269).

5D: Articulating the Library's Value

Section 5.7.5 of Chapter Five finds that articulating the library's value involves reporting to stakeholders, developing persuasive arguments for university administrators and encouraging the university to adopt the library's goals. These findings are an original addition to the current literature because there is no research into how the University Librarian articulates the library's value.

Non-research literature includes the literature review of Albert (2014), who states that the communication of value "involves sharing the results of assessment with stakeholder groups in a way that is most appealing and meaningful to them" (p.635). Hernon et al. (2014, p. 138) argue the importance of advocating the library's value to its stakeholders in order to gain extra resources or to gain a

collaborative partnership. They also assert that communication should be free of jargon and acronyms (Hernon et al., 2014, p. 140) and provide guidelines for communicating value.

5E: Engaged Culture

This substantive grounded theory finds that an engaged culture that is gregarious and can promote the library and its services is critical in demonstrating the library's value (section 5.7.6). This research provides empirical basis to the statements and theory of Bourne (2009) and Kaplan and Norton (1996), who state that customer satisfaction feedback can measure whether an organisational culture is engaged with stakeholders.

5F: Achieving Measures of Success

Very little LIS literature reveals how the University Librarian measures the Library's success demonstrating value to the university. However, the single case study of Wynne et al. (2016) illustrates how a re-branding process has successfully changed stakeholder perceptions about the library.

Original Contribution of this Research

Table 6.5 below shows that there is very little empirical research about how university librarians are demonstrating the value of the library. Therefore, this substantive grounded theory provides an original contribution that adds significantly to the domain.

Table 6.5

Key Findings of Category 5 and their Relationship to Recent Literature

Key findings of this research	Literature reference	Type of literature	Relationship to literature
Category 5: Demonstrating the library's value: Theoretical literature	*Bourne (2009) *Albert (2014)	*Text (Project management) *LIS Literature review	* Application to LIS & offers empirical basis *Extends - empirical basis
Category 5: Demonstrating the library's value: LIS research	*Hernon et al. (2014) *Oakleaf (2010) *Saunders (2016)	*LIS text *Literature review *LIS text	*Extends with Original integrated theory *Extends with Original integrated theory *Extends with Original integrated theory
5A: Struggling to demonstrate the library's value	*Robertson (2015) *Saunders (2016)	*Interviews *Content analysis	*Extends - experience of University Librarian * Extends - experience of University Librarian

Key findings of this research	Literature reference	Type of literature	Relationship to literature
5B: Using evidence-based measurements of value	*Bresciani (2010) *Franklin (2010) *Hernon et al. (2014) *Reid (2011) *Saunders (2016)	*Theoretical (Strategic planning) *Case study *LIS text *Literature review *Content analysis	*Application to LIS & offers empirical basis *Extends to experience of University Librarian *Provides empirical basis *Provides empirical basis *Extends to experience of University Librarian
5C: Demonstrating the library's value	*Hernon et al. (2014) *Oakleaf (2010) *Otero-Boisvert (2015) *Robertson (2015) *Wynne et al. (2016)	* LIS text *Literature review *Ethnography *Interviews *Single descriptive case study	*Provides empirical basis *Provides empirical basis *Similar findings *Extends to experience of University Librarian *Extends to experience of University Librarian
5D: Articulating the library's value	*Albert (2014) *Hernon et al. (2014)	*Literature review *LIS text	*Provides empirical basis * Provides empirical basis
5E: Engaged culture	*Bourne (2009) *Kaplan and Norton (1996)	*Text (Project management) *Text (Balanced scorecard)	* Provides empirical basis * Provides empirical basis
5F: Achieving measures of success	*Wynne et al. (2016)	*Single case study	*Extends to experience of University Librarian

6.4.6 The Overall Substantive Grounded Theory

The integrated substantive grounded theory of how the University Librarian ensures the relevance of the library to its stakeholders has close similarities to a number of theories propounded by various authors:

- Learning organisation theory
- Dynamic capabilities theory
- Stakeholder relationship management theory
- Evidence-based library and information practice (EBLIP)

While sections of this theory have some similarities to other theoretical concepts within the LIS domain, such as the participatory library (Nguyen, 2014, 2015) (section 6.4.3), they do not provide an overall theory about how the University Librarian ensures the relevance of the library to its stakeholders.

The Substantive Grounded Theory and Learning Organisation Theory and Dynamic Capabilities Theory

The literature review of Chapter Two discussed two theories from management literature: learning organisation theory and dynamic capabilities theory. This literature review demonstrated that there was very little research relating these concepts to the academic library. Table 6.6 below shows that there are many similarities between the concepts of both learning organisation theory and dynamic capabilities theory, and the categories of Chapter Five. Both theories stress the importance of culture, but they do not place it as an important concept that interacts with strategy. Both theories also discuss the importance of the leader's role, the importance of sensing the environment, and of connecting with customers, and Teece (2007) talks of continuous realignment. The substantive grounded theory offered here differs in that it stresses the constant cyclical and iterative process of maintaining the library's relevance.

The Substantive Grounded Theory and Stakeholder Relationship Management Theory

Further scrutiny of extant literature relating to stakeholder management reveals a similarity with the project management domain. The research of Bourne (2009) has generated a model of organisational activity success, a framework for stakeholder relationship management, and a maturity model for stakeholder relationship management. For the model of organisational activity success, Bourne (2009) synthesises research into the main areas that affect the success of any organisational activity. The three main elements are:

1. Delivery of value;
2. Management of risk;
3. Managing key relationships with stakeholders (Bourne, 2009, p. 16)

Bourne's model of the interconnected elements of success (Figure 6.1) emphasises the interdependence of these concepts and the importance of managing people through the communication of information "to report in the delivery of value, and also to manage risk" (Bourne, 2009, p. 20).

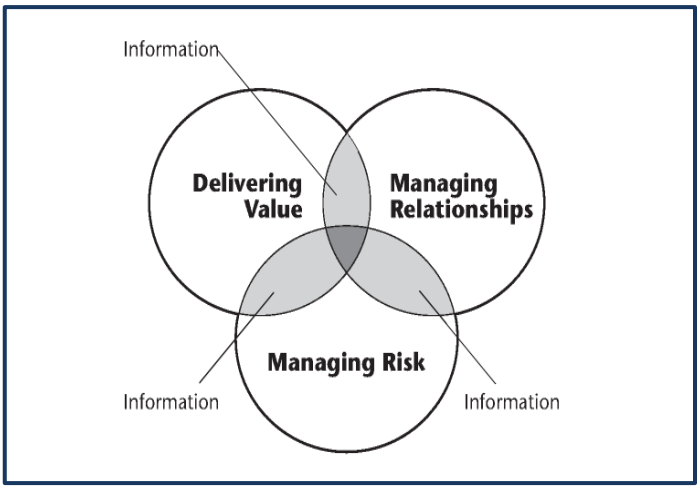

Figure 6.1 The interconnected elements of success (Bourne, 2009, p. 17).

Reproduced from *Stakeholder Relationship Management, Figure 1.2,* with permission of Routledge, publisher.

The substantive grounded theory and the theoretical model of this research (Chapter Five) relate closely to Bourne's (2009) theoretical framework of stakeholder relationship management, as shown in Table 6.6 below. However, it differs in two ways. Firstly, it differs by relating to the academic library context and specifying five different categories in a cyclical process. Bourne (2009) refers to *delivering value,* but this research splits this concept into *aligning library strategic vision with the university* and *demonstrating the library's value*. Secondly, the model offered in this research differs from Bourne's (2009) model of organisational success by emphasising the importance of action brought to bear by the University Librarian in creating both culture and strategy. The model of this research (Figure 5.7) also makes more explicit the necessity of organisational culture, and also the cultural elements required in the current academic library environment.

The Substantive Grounded Theory and Evidence-Based Library and Information Practice (EBLIP)

The concept of evidence-based library and information practice relates to this research as discussed above in sections 6.4.1 to 6.4.5. Hernon et al. (2014) include the following steps in the EBLIP decision-making cycle:

> Step 1: Formulate a clearly defined, relevant, and answerable question which addresses a defined problem;
>
> Step 2: Find the best evidence to answer the question;
>
> Step 3: Critically appraise the validity, importance, and usefulness of the evidence;

> Step 4: Combine the appraisal with professional knowledge and make a decision that applies the appraised evidence to the problem;
> Step 5: Evaluate the effectiveness and efficiency of the results (the change) to ensure quality; and
> Step 6: Disseminate the research (Hernon et al., 2014, p. 22)

EBLIP relates to the decision-making processes that take place within the library, rather than to the University Librarian's specific role. EBLIP is similar to the approach this theory takes because it produces a structured and cyclical approach to decision making. Nevertheless, this substantive grounded theory has an explicit research question that relates to the actions of the University Librarian in ensuring the library's relevance to its stakeholders. Moreover, this theory states the importance of an agile and engaged culture and its centrality to other strategies.

Table 6.6 below compares the theoretical concepts of this substantive grounded theory with the main theoretical concepts from all four related theories discussed here in this section: learning organisation theory, dynamic capabilities theory, stakeholder relationship management, and EBLIP.

Table 6.6

Comparison of this Overall Theory to Relevant Theories

This Substantive Grounded Theory	Learning Organisation Theory	Dynamic Capabilities Theory	Stakeholder Relationship Management	Evidence-Based Library and Information practice (EBLIP)
Context: Academic Libraries	**Context: General organisational theory**	**Context: General organisational theory**	**Context: General organisational theory**	**Context: Libraries - originated in health libraries**
Theory type: Explanatory: Integrated theory Shows process as cyclical Importance of culture and strategy	**Framework for organisational learning Integrates people and structure (culture and strategy)** Marsick and Watkins (1999) Yang et al. (2004)	**Theory: Integrated theory Shows process Includes culture, but minor consideration** Teece (2007) Teece et al. (1997)	**Theoretical Model of organisational success Interconnected/ Interdependent elements of success Culture not specified** Bourne (2009)	**Structured Approach to Library decision making Shows process: steps in cycle of improvement** Hernon et al. (2014, p. 21) Wilson and Grant (2013)

This Substantive Grounded Theory	Learning Organisation Theory	Dynamic Capabilities Theory	Stakeholder Relationship Management	Evidence-Based Library and Information practice (EBLIP)
Importance of University Librarian	**Importance of executive leader** Senge (1990) Senge (2006) **Strategic leadership** Marsick and Watkins (1999) Watkins and Marsick (1993) **Supportive management** Pearn et al. (1995)	**Executive leader has entrepreneurial style of management; seeking improvement and innovation** Teece (2007)	**Importance of CEO in supporting continuous stakeholder management** Bourne (2009, p. 4)	**EBLIP can be used by all librarians in their professional practice** Hernon et al. (2014) Wilson and Grant (2013)
Aligning library strategic vision with the university	**Vision: Connect the organisation to its environment** Watkins & Marsick (1993) Marsick & Watkins (1999) **Vision for the future** Pearn et al. (1995) **Vision & vision sharing** Senge (1990) **Organisational memory** A. Örtenblad (2004) Huber (1991)	**Sensing & shaping opportunities & threats: Analytical systems & individual capacity to sense, filter, shape & calibrate opportunities** Teece (2007) **Managing threats & reconfiguration: Continuous alignment/Embrace innovation/ Strategic fit** Teece (2007)	**Delivering value: Alignment of organisation's activity to "strategic operational and tactical objectives"** Bourne (2009, p. 15)	**Step 1: Formulating a question to answer a problem: Examples: What is our university's strategy? How do we align our strategy with the university's strategy?** Hernon et al. (2014) Wilson and Grant (2013)
Reinventing the library	**Systems thinking (2.5.3) Learning structure** (A. Örtenblad, 2004) **Empowering towards collective vision** Marsick and Watkins (1999) **Systems for capturing and sharing learning** Marsick and Watkins (1999) **Integration of learning** Nevis et al. (1995) **Transforming structures** Pearn et al. (1995) **Information interpretation** Huber (1991) **Systems thinking** Senge (1990)	**Seizing opportunities: *Delineating the customer solution and the business model *Selecting decision-making protocols *Selecting enterprise boundaries** Teece (2007)	**Managing risk: "Minimising potential risks while maximising potential opportunities"** Bourne (2009, p. 18) **Stakeholder Relationship Management Maturity® model** Bourne (2009)	**Step 3: "Critically appraise the validity, importance, and usefulness of the evidence" Step 4: "Combine the appraisal with professional knowledge and make a decision that applies the appraised evidence to the problem"** Hernon et al. (2014, p. 22) **Step 5: "Evaluate the effectiveness and efficiency of the results (the change) to ensure quality"** Hernon et al. (2014, p. 22)

This Substantive Grounded Theory	Learning Organisation Theory	Dynamic Capabilities Theory	Stakeholder Relationship Management	Evidence-Based Library and Information practice (EBLIP)
Engaging with stakeholders	**Sensing the environment (2.5.1)** **Organisational memory** A. Örtenblad (2004) **Connecting organisation to its environment** Marsick and Watkins (1999) **Systems to capture and share learning** Watkins and Marsick (1993) Marsick and Watkins (1999) **Knowledge acquisition** Nevis et al. (1995) **Inspired learners** Pearn et al. (1995) **Knowledge acquisition** Huber (1991)	**Sensing and shaping opportunities and threats:** ***Identifying market segments and customer needs** Teece (2007) ***Close engagement with customers** Wang et al. (2016) Agarwal et al. (2015) Carbonell and Rodriguez-Escudero (2014) Kindström et al. (2013) Ordanini and Parasuraman (2011)	**Managing relationships** Bourne (2009) **Stakeholder Circle Methodology®** Bourne (2009)	**Step 2: "Find the best evidence to answer the question"** Hernon et al. (2014, p. 22)
Building an agile and engaged culture	**Learning climate** A. Örtenblad (2004) **Collaboration and team learning** Marsick and Watkins (1999) **Nurturing culture** Pearn et al. (1995) **Promote inquiry, dialogue, continuous learning** Marsick and Watkins (1999) **Team learning** Senge (1990) **Personal mastery** Senge (1990) **Mental models** Senge (1990)	**Seizing opportunities:** **"*Building loyalty and commitment** ***Demonstrating leadership** ***Effectively communicating** ***Recognising non-economic factors, values and culture"** Teece (2007, p. 1134)	**"Creating a stakeholder-aware culture"** Bourne (2009, p. 4) **Embedding stakeholder management in organisational culture** Bourne (2009, p. 5) **"People are key"** Bourne (2009, p. 20)	**Culture is not explicit in the literature** ***Evidence-based decision making is part of a learning culture** Somerville (2015)
Demonstrating the library's value	**Knowledge management (2.5.2)** **Connect the organisation to its environment** Watkins & Marsick (1993) Marsick & Watkins (1999) **Knowledge sharing** Nevis et al. (1995) Huber (1991)	**Managing threats and reconfiguration:** ***Continuous alignment and realignment** Teece (2007)	**Delivering value** Bourne (2009) **"Communication related to value"** Bourne (2009, p. 18) **Reporting the delivery of value** Bourne (2009, p. 20)	**Step 6: Disseminate the research** Hernon et al. (2014, p. 22)

6.4.7 The Substantive Grounded Theory and the Relationship between Culture and Strategy: Competing Values Framework

The substantive grounded theory of Chapter Five finds that a university library culture that is agile and engaged has an interdependent relationship with the various strategies that ensure the library's relevance. The finding that the library requires an agile and engaged culture reflects the competing values framework (CVF) of Cameron and Quinn (2011) that presents a model that categorizes organisational culture into four types, as seen in Figure 6.2 below.

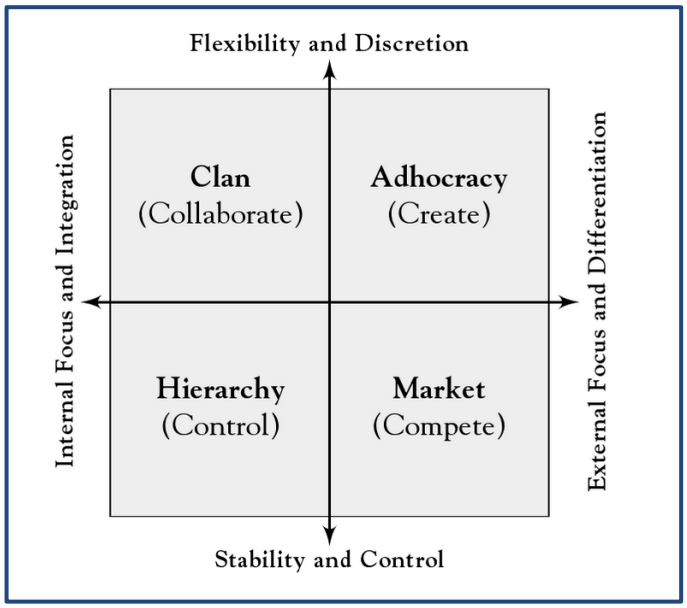

Figure 6.2. Competing values framework (Cameron & Quinn, 2011, p. 39)

Using the CVF framework, the survey research of Ahmadi, Salamzadeh, Daraei, and Akbari (2012, p. 295) finds an important relationship between culture and the implementation of strategy, and that clan and adhocracy cultures positively impact strategy implementation. The case study research of van der Maas (2008, p. 204) also finds an important relationship between an "empowered and fearless" organisational culture and strategy implementation. The LIS survey research of Maloney et al. (2010) finds that academic research library leaders are seeking a shift from a hierarchy culture towards an adhocracy culture.

This substantive grounded theory differs from the literature cited above in that it finds the importance of both a culture and strategy that encourage constant change. Moreover, while the CVF of Cameron and Quinn (2011) and the research of Ahmadi

et al. (2012) and van der Maas (2008) state that culture affects strategy, this research finds that strategy also affects culture. In other words, a culture of agility and engagement cannot exist without strategy that focuses upon agility and engagement. Likewise, strategy that focuses upon agility and engagement is dependent upon a culture that supports these strategies.

6.5 EVALUATION OF THE SUBSTANTIVE GROUNDED THEORY

The generation of credible theory relies upon the rigour, or quality in the research process (Birks & Mills, 2011, p. 33). Glaser and Strauss (1967) and Glaser (1992, p. 116; 1998) rely upon the concepts of fit, work, relevance and modifiability in ensuring the trustworthiness of a grounded theory study. A number of authors have written about how a grounded theory study can demonstrate reliability and validity. For example, Chiovitti and Piran (2003, p. 427) and Corbin and Strauss (2008, p. 302) argue that the integrity of the research process and the credibility of the researcher are underpinned by the consistent application of all steps of the methodology. This begins with clarity of purpose in creating a theory (Corbin & Strauss, 2008, p. 302). Chiovitti and Piran (2003, p. 429) state that the researcher's self-awareness through asking "What is happening in the data?" will eliminate bias and ensure validity. Birks and Mills (2015, p. 33) argue that "researcher expertise, methodological congruence and procedural precision" are the main determinants of quality grounded theory research.

Instead of the criteria proposed by these authors, Charmaz (2006; 2014) proposes the following criteria for evaluating the rigour of the grounded theory process: credibility, originality, resonance, and usefulness. Charmaz provides a more detailed and practical set of questions that assist the researcher in evaluating the quality of the final grounded theory.

6.5.1 Credibility

Charmaz asserts that credibility can be achieved through the researcher's "intimate familiarity" with the topic (Charmaz, 2006, p.182). Charmaz (2006, p. 182; 2014, p.337) elaborates upon this further in stating that the study must include the collection of data that has sufficient range, number and depth, systematic analytical comparisons, and a wide range of categories. In summary, the evidence must be

compelling enough to persuade the reader of the validity of the theory (Charmaz, 2006, p.182; 2014, p.337).

The credibility of this research is demonstrated in the range of participants and their university types and the high quality of data obtained from them. The quality of the data is evidenced by the quality of the participants' quotes that are included in Chapters Five and Six. The tables and sections that discuss the comparisons between the university types in Chapter Six are evidence of systematic analytical comparisons. Moreover, they are evidence that the researcher has intimate knowledge of the data. Finally, the five categories that are elaborated upon in Chapter Six are significantly diverse and they satisfy the criteria for a wide range of categories.

6.5.2 Originality

Charmaz (2014, p. 337) suggests that there should be originality in the theory. In achieving this, the researcher asks whether categories are original and does the analysis provide new insights? In short, is the substantive grounded theory new and significant? (Charmaz, 2006, p. 182; 2014, p. 337). The originality of the substantive grounded theory is explained in section 6.4.6 and 6.4.7 and is shown in Table 6.6 of this chapter.

To summarise, this substantive grounded theory is original in two ways. It is the first theory to explain how the University Librarian ensures the relevance of the library to stakeholders. Secondly, the substantive grounded theory suggests that the relationship between culture and strategy is mutually dependent, rather than the action of culture upon strategy, as proposed by various authors (Ahmadi et al., 2012; Cameron & Quinn, 2011; van der Maas, 2008).

6.5.3 Resonance

Charmaz argues that a theory has rigour if its meanings resonate with participants. This ensures that the theory reliably reflects the data, but also provides participants with a deeper insight into their actions and behaviour (Charmaz, 2006, p.183; 2014, p.337). Once again, this demonstrates that the researcher has been listening intently to the data that has emerged from the interactive partnership between researcher and participant.

As explained in section 4.6.7 of Chapter Four, four participants from different university types were shown the model. This final stage enabled minor changes to be made in order to improve the theory. During this interview participants were given a detailed explanation of the model, the theory and its categories. Participants were then invited to answer a number of questions as shown in Appendix D.

The four participants expressed general concurrence that the model and the theory resonated with their experience. For example, P1 stated:

> *What resonated for me was the accuracy of the representation. It seems to me you have captured the core essential elements of establishing and maintaining and sustaining relevance within a higher education academic library and within the larger context of higher education. I responded positively to your depiction of the truth and the accuracy of your categories and the language you used to establish those elements.*

Nevertheless, each of the participants identified different areas of importance for them in 2016. P1 and P12 stated that building an agile and engaged culture was important, P2 was working on reinvention of the library, while P11, having recently worked on major reinvention, was working to realise goals.

6.5.4 Usefulness

This substantive grounded theory is useful to University Librarians and to the leaders of their teams. The theory provides practical guidelines that leaders can follow to realise each of the major steps in ensuring the relevance of the library to its stakeholders. Contributions to both practice and theory are detailed below in sections 6.6 and 6.7.

6.6 SIGNIFICANCE OF THIS RESEARCH FOR LIS PRACTICE

This research and its outcome, the substantive grounded theory, has implications for university library practice and may have significant impact for University Librarians and senior library leaders in the areas below (sections 6.6.1 to 6.6.6). The substantive grounded theory also has significant impact upon the behaviours required for library staff (section 6.6.5). It may also have a flow-on effect upon course and unit design in LIS schools in Australia and internationally, particularly as it recommends knowledge of research methods.

6.6.1 The University Librarian

This substantive grounded theory will benefit University Librarians in their understanding of how they are ensuring the library's relevance to its stakeholders. The findings will also impact the capabilities and personal attributes required of the University Librarian. The substantive grounded theory finds that the University Librarian must have an outward-looking focus that recognises the vision of the university and the role of the library in supporting the vision, and must be prepared to contribute towards the university vision. The University Librarian must recognise the limitations of the university environment and embrace the opportunities of the university context. The University Librarian must also have the ability to promote the library to university administrators, senior faculty, others in the library profession and community stakeholders. Finally, the University Librarian must be systematic in planning for goals, providing key performance indicators to measure progress.

6.6.2 Category 1: Aligning Library Strategic Vision with the University

The findings of Category 1 may have significant impact upon strategic planning for academic libraries and upon the capabilities and attributes required for the senior leadership of the library. The requirement for the university library to align its strategic vision and goals with those of the university accentuates the need for the University Librarian and senior leadership to be familiar with the university's strategic directions, and to be sensitive and responsive to any changes. The University Librarian and leadership are also required to be strategic thinkers who are able to sense opportunities that may enhance the profile of the library. They should also be creative and customer-focused, being prepared to engage with and learn from the ideas of others. The substantive grounded theory accentuates the need for senior library leaders to be involved in strategic planning processes. Therefore, involvement in strategic planning processes should be embedded into the roles and responsibilities of senior library management.

6.6.3 Category 2: Continuously Reinventing the Library

The results of Category 2 impact the organisational design of the library, its learning and knowledge management infrastructure and practices, its culture, and its capacity for collection and analysis of evidence for decision making. The University Librarian and senior leadership are required to continuously evaluate the library's

organisational structure, workflows, communications, service offerings and technology. This activity necessitates that the University Librarian and senior library staff have attitudes that view criticism as a means for improvement.

The research also finds that the University Librarian and senior library leadership are to view all library systems as part of the university whole, considering the impact of each part upon all stakeholders, and therefore weighing the risks of changes. Category Two also requires the University Librarian and senior library leadership to learn from others, communicate well and work collaboratively with others both inside and outside the library. The encouragement of team structures and agile culture that empowers staff to make decisions without reference to higher levels of authority facilitates rapid response to stakeholder needs. The encouragement of team structures and culture may also require changes in the attributes and behaviours of senior library staff that will negate micro managing tendencies.

The final impact of Category 2 is that the University Librarian and senior library staff are to consider empirical evidence as crucial to their decision-making processes. Therefore, new research roles may be needed, existing library staff may be required to undertake training in research methods, or such work can be outsourced.

6.6.4 Category 3: Engaging with Stakeholders

The findings of Category 3 will assist university libraries in increasing the library's perceived value to the university. This is achieved by attaining the support and commitment of stakeholders through their increased involvement with the library's services and activities (Bourne, 2009, p. 93). As stated in section 6.6.3, engaging with stakeholders in a systematic manner will have implications for decision making, and will therefore require senior library leaders to spend more time and effort in developing a holistic framework for engagement. The approach will involve systematic and continuous data gathering, analysis, and review of the library's engagement strategy.

A second implication is that an engaged culture requires recruitment of staff with the attitudes and personal attributes that reflect the culture. Therefore, role descriptions and selection criteria will require that employees are service oriented, collaborative, and responsive to stakeholders and promoting the library and its

services. Staff members will also be required to have behaviours that enable them to work collaboratively in teams.

A final implication is that the University Librarian must be prepared to release staff of all levels to engage with stakeholders where appropriate, in order to maximise the library's engagement with both internal and external community stakeholders.

6.6.5 Category 4: Building an Agile and Engaged Culture

The results of Category 4 impact the role of the University Librarian and the senior library leadership. They also reinforce the importance of workforce planning, management, training and recruitment processes. The University Librarian and senior library leadership are required to intentionally lead and model the agile and engaged library culture. Therefore, they are required to have the attributes that enable them to continuously consider improvements to library services and engage with various departments, faculties and bodies that are external to the university.

The findings of the substantive grounded theory also mean that workforce planning that aligns staff skills with the university and library strategic goals is a continuous activity. Workforce planning that ensures employees are flexible and have the attitudes and potential for future challenges requires constant attention to role descriptions, professional development and performance reviews. Such important activity potentially means the employment of a HR professional in the library or closer collaboration with the university HR department.

6.6.6 Category 5: Demonstrating the Library's Value

The participants in this research highlighted the difficulty in demonstrating the library's value. The results of Category 5 reinforce the importance of providing empirical data that demonstrates that the library is meeting key performance indicators as specified in its strategic plans. Therefore, the library's senior leadership must rely upon research data. Once again, this has implications for training of library staff in research methods, the possible employment of researchers or outsourcing of such work.

The political nature of the University Librarian's role as an ambassador and advocate for the library and its services is once again highlighted. The University Librarian and the senior library leadership are instrumental in striving for the

library's reputation for delivery of excellent services and for demonstrating that they are serving the university's goals. Therefore, the University Librarian is required to possess the ability to present persuasive arguments in both written and spoken communication.

6.7 SIGNIFICANCE OF THE SUBSTANTIVE GROUNDED THEORY FOR RESEARCH

The substantive grounded theory provides a significant contribution to the body of LIS knowledge because the study of the academic library, in terms of how it strategically ensures relevance, is an emerging field of research. The paucity of empirical research is demonstrated in the literature review (Chapter Two). This research is also unique because it applies a constructivist grounded theory research method to examine the phenomenon. Previous studies examining the phenomenon of strategies for maintaining relevance of the academic library have been single case studies. No wider empirical research has been undertaken into this phenomenon, and no wider research has examined the actions of the University Librarian in ensuring the relevance of the university library to stakeholders in the face of competition from of open access information sources.

6.8 LIMITATIONS OF THIS RESEARCH

A limitation of this research is that a grounded theory aims to produce a substantive grounded theory, but does not seek to validate it (Glaser & Strauss, 1967). In addition to this, a grounded theory does not produce a "perfected product", but rather a theory that is part of a process (Glaser & Strauss, 1967, p. 32). Subsequent research can test the theory and refine it further.

In considering the context of the participants and the interview process, two main factors emerged that caused some concern for the participants or hampered the research process. Firstly, the interviews took place at a time of much vaunted changes in higher education policy in Australia. The proposed changes caused at least one participant to consider a major restructure for the library involving redundancies (P2). However, later in the year of 2015, such concerns evaporated from the interview data as the legislation was blocked in the Australian upper house, the Senate.

The second factor hampered the research process itself. This factor was that many of the prospective participants did not meet the criteria that were set for participation in the research. To put it simply, while researching possible participants, many were ineligible due to their short time of incumbency in the position. This was particularly the case in the RUN sector, where it was difficult to find participants who met the criteria or were willing to take part in the research. Therefore, a second RUN participant was only engaged later in the theoretical sampling stage.

Another limitation is that the study seeks the experiences and perceptions of the University Librarian rather than other staff members of the academic library. Moreover, this research does not seek to discover the impact of the library on university, research or student outcomes.

6.8.1 Suggestions for Future Research

This research explored the experience of University Librarians in ensuring the relevance of the university library to its stakeholders. Future studies may test the substantive grounded theory by interviewing or surveying the stakeholders to determine whether the university library is relevant to their needs. Possible questions for future research to test the impact of the library upon its various stakeholders are:

1. How do faculty and researchers perceive the impact of the library upon their teaching/research outcomes
2. How do undergraduate students perceive the impact of the library upon their learning outcomes?
3. How do other university departments perceive the impact of collaboration with the library upon their performance/outcomes?
4. How does the work of the university library impact the university's research rankings?

Future research may also explore further the relationship between organisational culture and strategy. Potential research projects can extend from the application of the conceptual categories to practice. For example, during the course of the research participants expressed the difficulty of demonstrating the library's value to the university. In order to investigate how the library can demonstrate its value, possible research methods include multiple case studies that include textual

analysis of annual reports or websites (Ramirez, 2015, p. 20), or a mixed-methods approach that studies the ways that libraries are reporting and demonstrating the library value, followed up by interviews with university decision makers (Silverman, 2013a). Action research is another possible research method that may be used to investigate the demonstration of the library's value to the university (Marshall & Rossman, 2015, p. 26)

Participants also expressed interest in the culture of the library. An ethnographic research method is best suited to inquiry that seeks to investigate an academic library culture (Marshall & Rossman, 2015, p. 17). Action research would also investigate an academic library that is seeking to improve its organisational culture (Marshall & Rossman, 2015, p. 26).

6.9 CONCLUSION

This research investigated how the University Librarian ensures the relevance of the academic library to its stakeholders in the face of competition from open access information sources. The constructivist grounded theory research method involved 14 interviews that inductively generated a theory that was co-constructed by the researcher and 12 University Librarians. Together, the researcher and participants produced a substantive grounded theory that consisted of a cyclical pattern, where the strategy of building an agile and engaged culture is central to, and interacts with each of the other strategies:

1. Aligning strategic vision with the university
2. Continuously reinventing the library
3. Engaging with stakeholders
4. Building an agile and engaged culture
5. Demonstrating value to the university

The substantive grounded theory signifies the important role of the University Librarian as the agent and model for library strategy and culture that drives the library forward in ensuring its relevance to its stakeholders. Moreover, this theory demonstrates the attitudes and behaviours required of senior library leaders and staff in order to future proof the library's role on the campus. A customer-focused, creative, learning and collaborating library culture enables the library to continuously

realign its strategic vision with the university, reinvent itself, engage with its stakeholders, and demonstrate its value to the university. In a corresponding manner, the library that is continuously realigning its strategic goals and reinventing its services sustains the momentum of a library culture that is continually striving for improvement.

Bibliography

Abdullah, K. A. S., & Kassim, N. A. (2008). Perceptions of organizational learning practices among Yemeni university librarians. *Malaysian Journal of Library & Information Science*, *13*(1), 77-90.

Abend, G. (2008). The meaning of 'theory'. *Sociological Theory*, *26*(2), 173-199. doi:10.1111/j.1467-9558.2008.00324.x

Agarwal, R., Selen, W., Roos, G., & Green, R. (2015). *The handbook of service innovation* (Vol. 2015). London: Springer.

Ahmadi, S. A. A., Salamzadeh, Y., Daraei, M., & Akbari, J. (2012). Relationship between organizational culture and strategy implementation: Typologies and dimensions. *Global Business and Management Research, 4*(3/4), 286-299.

Albert, A. B. (2014). Communicating library value - the missing piece of the assessment puzzle. *Journal of Academic Librarianship*, *40*(6), 634-637. doi:10.1016/j.acalib.2014.10.001

Angus, D. (Producer). (2014). Leximancer: From word to meaning to insight. *Leximancer tutorial 2014*. Retrieved from https://www.youtube.com/watch?v=F7MbK2AF0qQ

Antonacopoulou, E., & Kandampully, J. (2000). Alchemy: The transformation to service excellence. *The Learning Organization, 7*(1), 13-22.

Appleton, L., Stevenson, V., & Boden, D. (2011). Developing learning landscapes: Academic libraries driving organisational change. *Reference Services Review, 39*(3), 343-361. doi:10.1108/00907321111161368

Argyris, C., & Schön, D. (1978). *Organizational learning: A theory of action perspective.* Reading, MA: Addison-Wesley.

Argyris, C., & Schön, D. (1996). *Organizational learning II: Theory, method, and practice.* . Reading, MA: Addison-Wesley.

Armstrong, A. (2012). Marketing the library's instructional services to teaching faculty: learning from teaching faculty interviews. In L. M. Duke & A. D. Asher (Eds.), *College libraries and student culture: What we know now* (pp. 31-48). Chicago: American Library Association.

Asher, A. D., & Duke, L. M. (2012a). Conclusions and future research. In L. M. Duke & A. D. Asher (Eds.), *College libraries and student culture: What we now know* (pp. 161-167). Chicago: American Library Association.

Asher, A. D., & Duke, L. M. (2012b). Searching for answers: Student research behavior at Illinois Wesleyan University. In L. M. Duke & A. D. Asher (Eds.), *College libraries and student culture: What we now know* (pp. 71-85). Chicago: American Library Association.

Association of Research Libraries. (2013). Library and university expenditure trends (Time-Series). Retrieved from http://www.libqual.org/documents/admin/EG_3.pdf

Australian Technology Network of Universities. (n.d.). Australian Technology Network of Universities. Retrieved from https://www.atn.edu.au/

Ball, R., & Tunger, D. (2006). Bibliometric analysis - A new business area for information professionals in libraries? *Scientometrics, 66*(3), 561-577. doi:10.1007/s11192-006-0041-0

Bastian, D. (2014). Rough trim. *Campus Review (Paddington, N.S.W.), 24*(6), 15.

Bates, M. J. (2005). An introduction to metatheories, theories, and models. In K. E. Fisher, S. Erdelez, & L. McKechnie (Eds.), *Theories of information behavior* (pp. 1-24). Medford, NJ: Information Today.

Becker, L. K. W. (2006a). Globalisation and internationalisation: Models and patterns of change for Australian academic librarians. *Australian Academic & Research Libraries, 37*(4), 282-298.

Becker, L. K. W. (2006b). Internationalisation: Australian librarians and expanding roles in higher education. *Australian Academic & Research Libraries, 37*(3), 200-220.

Bessant, J., Caffyn, S., Gilbert, J., Harding, R., & Webb, S. (1994). Rediscovering continuous improvement. *Technovation, 14*(1), 17-29. doi:10.1016/0166-4972(94)90067-1

Bieraugel, M. (2015). Managing library innovation using the lean startup method. *Library Management, 36*(4/5), 351-361.

Birks, M., Chapman, Y., & Francis, K. (2008). Memoing in qualitative research: Probing data and processes. *Journal of Research in Nursing, 13*(1), 68-75. doi:10.1177/1744987107081254

Birks, M., & Mills, J. (2011). *Grounded theory: A practical guide*. Los Angeles: SAGE.

Birks, M., & Mills, J. (2015). *Grounded theory: A practical guide* (2nd ed.). Los Angeles: SAGE.

Blessinger, K., & Hrycaj, P. (2013). *Workplace culture in academic libraries: The early 21st century*. Oxford, UK: Chandos. .

Booth, A., & Brice, A. (2004). *Evidence-based practice for information professionals: A handbook*. London: Facet.

Bourne, L. (2009). *Stakeholder relationship management : A maturity model for organisational implementation*. Abingdon, UK: Routledge.

Bourne, L., & Walker, D. H. T. (2006). Visualizing stakeholder influence: Two Australan examples. *Project Management Journal, 37*(1), 5-21.

Bowen, G. A. (2008). Naturalistic inquiry and the saturation concept: A research note. *Qualitative Research, 8*(1), 137-152. doi:10.1177/1468794107085301

Bresciani, M. J. (2010). Data-driven planning: Using assessment in strategic planning. *New Directions for Student Services, 2010*(132), 39-50. doi:10.1002/ss.374

Brinkmann, S., & Kvale, S. (2015). *InterViews: Learning the craft of qualitative research interviewing* (3rd ed.). Los Angeles: SAGE.

Brown, J. S., & Duguid, P. (1991). Organizational learning and communities-of-practice: Toward a unified view of working, learning, and innovation. *Organization Science, 2*(1), 40-57. doi:10.2307/2634938

Bruce, C., Hughes, H., & Somerville, M. M. (2012). Supporting informed learners in the twenty-first century. *Library Trends, 60*(3), 522-545. doi:10.1353/lib.2012.0009

Brundy, C. (2015). Academic libraries and innovation: A literature review. *Journal of Library Innovation, 6*(1), 22-39.

Bryant, A., & Charmaz, K. (2007a). Grounded theory in historical perspective: An epistemological account. In A. Bryant & K. Charmaz (Eds.), *The SAGE handbook of grounded theory* (pp. 31-57). Los Angeles: SAGE.

Bryant, A., & Charmaz, K. (2007b). Grounded theory research: Methods and practices In A. Bryant & K. Charmaz (Eds.), *The SAGE handbook of grounded theory* (pp. 1-28). Los Angeles: SAGE.

Bryson, J. (2011). *Managing information services: A sustainable approach* Retrieved from http://www.eblib.com

Budd, J. (2012). *The changing academic library: Operations, culture, environments* (2nd ed.). Chicago: Association of College and Research Libraries.

Burns, J. M. (2003). *Transforming leadership: The pursuit of happiness*. New York: Atlantic Monthly Press.

Burr, V. (2015). *Social constructionism* (3rd ed.). London: Routledge.

Bushe, G. R., & Kassam, A. F. (2005). When is appreciative inquiry transformational? A meta-case analysis. *The Journal of Applied Behavioral Science, 41*(2), 161-181.

Cameron, K. S., & Quinn, R. E. (2011). *Diagnosing and changing organizational culture* (3rd ed.). San Francisco: Jossey Bass

Cao, L. L., & Dupuis, M. (2009). Core competences, strategy and performance: The case of international retailers in China. *The International Review of Retail, Distribution and Consumer Research*, *19*(4), 349-369. Retrieved from doi:10.1080/09593960903331360

Carbonell, P., & Rodriguez-Escudero, A. I. (2014). Antecedents and consequences of using information from customers involved in new service development. *Journal of Business and Industrial Marketing, 29*(2), 112-122. doi:10.1108/JBIM-04-2012-0071

Carlson, J., & Kneale, R. (2011). Embedded librarianship in the research context: Navigating new waters. *College & Research Libraries News*, *72*(3), 167-170.

Casey, A. J., & Goldman, E. F. (2010). Enhancing the ability to think strategically: A learning model. *Management Learning, 41*(2), 167-185. doi:10.1177/1350507609355497

Casey, A. M. (2011). *Strategic priorities and change in academic libraries.* (Doctoral dissertation). Retrieved from http://gateway.library.qut.edu.au/login?url=http://search.proquest.com/docview/883918467?accountid=13380

Cecez-Kecmanovic, D., & Kennan, M. A. (2013). The methodological landscape: Information systems and knowledge management. In K. Williamson & G. Johanson (Eds.), *Research methods: Information, systems and contexts* (pp. 113-137). Prahran, Vic.: Tilde.

Cervone, H. F. (2007). *The effect of professional advice networks on receptivity to innovation in academic librarians.* (Doctoral dissertation). Retrieved from http://gateway.library.qut.edu.au/login?url=http://search.proquest.com/docview/304705076?accountid=13380

Chan, D. L. H., & Soong, S. C. (2011). Strategic repositioning in a dynamic environment. *Library Management, 32*(1/2), 22-36. doi:10.1108/01435121111102557

Charmaz, K. (2000). Grounded theory: objectivist and constructivist methods. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (2nd ed., pp. 509-535). Thousand Oaks, CA: Sage

Charmaz, K. (2005). Grounded theory in the 21st century: Applications for advancing social justice studies. In N. K. Denzin & Y. S. Lincoln (Eds.), *The SAGE handbook of qualitative research* (3rd ed., pp. 507-535). Thousand Oaks,CA: SAGE.

Charmaz, K. (2006). *Constructing grounded theory: A practical guide through qualitative analysis*. London: SAGE.

Charmaz, K. (2008). Constructionism and the grounded theory method. In J. A. Holstein & J. F. Gubrium (Eds.), *Handbook of constructionist research* (pp. 397-412). New York: Guilford Press.

Charmaz, K. (2009). Shifting the grounds: Constructivist grounded theory methods. In J. M. Morse, P. N. Stern, J. Corbin, B. Bowers, K. Charmaz, & A. E. Clarke (Eds.), *Developing grounded theory: The second generation* (pp. 127-154). Walnut Creek, CA: Left Coast Press.

Charmaz, K. (2011a). A constructivist grounded theory analysis of losing and regaining a valued self. In F. J. Wertz & K. Charmaz (Eds.), *Five ways of doing qualitative analysis* (pp. 165-204). New York: Guilford Press.

Charmaz, K. (2011b). Grounded theory methods in social justice research. In N. K. Denzin & Y. S. Lincoln (Eds.), *The SAGE handbook of qualitative research* (4th ed., pp. 359-380). Los Angeles: SAGE.

Charmaz, K. (2014). *Constructing grounded theory* (2nd ed.). Los Angeles: SAGE.

Chatten, Z., & Roughley, S. (2016). Developing social media to engage and connect at the University of Liverpool library. *New Review of Academic Librarianship*, 1-8. doi:10.1080/13614533.2016.1152985

Checkland, P. (2000). Soft systems methodology: A thirty year retrospective. *Systems Research and Behavioral Science, 17*(S1), 11-58.

Checkland, P. (2012). Four conditions for serious systems thinking and action. *Systems Research and Behavioral Science, 29*(5), 465-469. doi:10.1002/sres.2158

Chiovitti, R. F., & Piran, N. (2003). Rigour and grounded theory research. *Journal of Advanced Nursing, 44*(4), 427-435. doi:10.1046/j.0309-2402.2003.02822.x

Connaway, L. S., Dickey, T. J., & Radford, M. L. (2011). "If it is too inconvenient I'm not going after it:" Convenience as a critical factor in information-seeking behaviors. *Library & Information Science Research, 33*(3), 179-190. doi:10.1016/j.lisr.2010.12.002

Connaway, L. S., White, D., & Lanclos, D. (2011). Visitors and residents: What motivates engagement with the digital information environment? *Proceedings of the American Society for Information Science and Technology, 48*(1), 1-7. Retrieved from doi:10.1002/meet.2011.14504801129

Connaway, L. S., White, D., Lanclos, D., & Le Cornu, A. (2012). Visitors and residents: What motivates engagement with the digital information environment? *Information Research, 18*(1). Retrieved from http://InformationR.net/ir/18-1/paper556.html

Connor, E. M. L. S. (2007). *Evidence-based librarianship: Case studies and active learning exercises*. Oxford: Chandos.

Corbin, J., & Strauss, A. (2008). *Basics of qualitative research: Techniques and procedures for developing grounded theory* (3rd ed.). Los Angeles: SAGE.

Corrall, S., Kennan, M. A., & Afzal, W. (2013). Bibliometrics and research data management services: Emerging trends in library support for research. *Library Trends, 61*(3), 636-674.

Coutu, D. L. (2002). The anxiety of learning. *Harvard Business Review, 80*(3), 100-106.

Cox, A. M., & Corrall, S. (2013). Evolving academic library specialties. *Journal of the American Society for Information Science and Technology, 64*(8), 1526-1542. doi:10.1002/asi.22847

Creswell, J. W. (2013). *Qualitative inquiry and research design: Choosing among five approaches*. Thousand Oaks, CA: SAGE.

Crumley, E., & Koufogiannakis, D. (2002). Developing evidence-based librarianship: Practical steps for implementation. *Health information and libraries journal, 19*(2), 61-70. doi:10.1046/j.1471-1842.2002.00372.x

Cunningham, A. D. (2012). *Paradoxes and play: An emergent theory of how community college librarians sustain library instruction programs.* (Doctoral dissertation). Retrieved from http://gateway.library.qut.edu.au/login?url=http://search.proquest.com/docview/1056978551?accountid=13380

Cutcliffe, J. R. (2003). Reconsidering reflexivity: Introducing the case for intellectual entrepreneurship. *Qualitative Health Research, 13*(1), 136-148. doi:10.1177/1049732302239416

Daneshgar, F., & Parirokh, M. (2012). An integrated customer knowledge management framework for academic libraries. *The Library Quarterly, 82*(1), 7-28. doi:10.1086/662943

Davis, H. L., & Somerville, M. M. (2006). Learning our way to change: Improved institutional alignment. *New Library World, 107*(3/4), 127-140. doi:10.1108/03074800610654907

Davis, K. E. (2015). *The information experience of new mothers in social media: A grounded theory study.* (Doctoral dissertation). Retrieved from http://eprints.qut.edu.au/86784/

Day, J., & Bobeva, M. (2005). A generic toolkit for the successful management of Delphi studies. *Electronic Journal of Business Research Methods, 3*(2), 103-116. Retrieved from www.ejbrm.com

De Rosa, C., Cantrell, J., Gallagher, P., Hawk, J., Hoffman, I., & Page, R. (2014). *At a tipping point: Education, learning and libraries: A report to the OCLC membership* Retrieved from https://www.oclc.org/reports/tipping-point.en.html

Delaney, G., & Bates, J. (2015). Envisioning the academic library: A reflection on roles, relevancy and relationships. *New Review of Academic Librarianship, 21*(1), 30-51. doi:10.1080/13614533.2014.911194

den Hertog, P., van der Aa, W., & de Jong, M. W. (2010). Capabilities for managing service innovation: Towards a conceptual framework. *Journal of Service Management, 21*(4), 490-514. doi:10.1108/09564231011066123

Denda, K. (2015). Developing interview skills and visual literacy: A new model of engagement for academic libraries. *portal : Libraries and the Academy, 15*(2), 299-314.

Denda, K., & Hunter, J. (2016). Building 21st century skills and creating communities: A team-based engagement framework for student employment in academic libraries. *Journal of Library Administration, 56*(3), 251-265. doi:10.1080/01930826.2015.1121662

Dennis, M. (2012). Outreach initiatives in academic libraries, 2009-2011. *Reference Services Review, 40*(3), 368-383. doi:10.1108/00907321211254643

Denzin, N. K., & Lincoln, Y. S. (2011). The discipline and practice of qualitative research. In N. K. Denzin & Y. S. Lincoln (Eds.), *The SAGE handbook of qualitative research* (4th ed., pp. 1-19). Los Angeles: SAGE.

Derven, C., & Kendlin, V. (2011). Evidence-based librarianship: A case study of a print resource cancellation project. *The Journal of Academic Librarianship, 37*(2), 166-170. doi:10.1016/j.acalib.2011.02.009

Dey, I. (1993). *Qualitative data analysis: A user-friendly guide for social scientists*. London: Routledge.

Dey, I. (1999). *Grounding grounded theory: Guidelines for qualitative enquiry*. San Diego, CA: Academic Press.

Dey, I. (2007). Grounding categories. In A. Bryant & K. Charmaz (Eds.), *The SAGE handbook of grounded theory* (pp. 167-190). Los Angeles: SAGE.

Djellal, F., & Gallouj, F. (2013). The productivity challenge in services: Measurement and strategic perspectives. *The Service Industries Journal, 33*(3-4), 282-299. doi:10.1080/02642069.2013.747519

Dole, W. V. (2013). Strategic planning and assessment: Pigs of the same sow? *Journal of Library Administration, 53*(4), 283-292. doi:10.1080/01930826.2013.865397

Draucker, C. B., Martsolf, D. S., Ross, R., & Rusk, T. B. (2007). Theoretical sampling and category development in grounded theory. *Qualitative Health Research, 17*(8), 1137-1148. doi:10.1177/1049732307308450

Dunne, C. (2011). The place of the literature review in grounded theory research. *International Journal of Social Research Methodology, 14*(2), 111-124. doi:10.1080/13645579.2010.494930

Easterby-Smith, M., & Araujo, L. (1999). Organizational learning: Current debates and opportunities. In M. Easterby-Smith, L. Araujo, & J. Burgoyne (Eds.), *Organizational learning and the learning organization: Developments in theory and practice* (pp. 1-23). London: SAGE.

Easterby-Smith, M., Snell, R., & Gherardi, S. (1998). Organizational learning: Diverging communities of practice? *Management Learning, 29*(3), 259-272. doi:10.1177/1350507698293001

Eisenhardt, K. M., & Martin, J. A. (2000). Dynamic capabilities: What are they? *Strategic Management Journal, 21*(10/11), 1105-1121. doi:10.2307/3094429

Eldredge, J. (2006). Evidence-based librarianship: The EBL process. *Library Hi Tech, 24*(3), 341-354. doi:10.1108/07378830610692118

Esson, R., Stevenson, A., Gildea, M., & Roberts, S. (2012). Library services for the future: Engaging with our customers to determine wants and needs. *Library Management, 33*(8/9), 469-478. doi:10.1108/01435121211279830

Falciani-White, N. (2013). *"The complexity of experience": A grounded theory exploration of scholarly practice.* (Doctoral dissertation). Retrieved from http://gateway.library.qut.edu.au/login?url=http://search.proquest.com/docview/1501659485?accountid=13380

Fendt, J., & Sachs, W. (2008). Grounded theory method in management research: Users' perspectives. *Organizational Research Methods, 11*(3), 430-455. Retrieved from doi:10.1177/1094428106297812

Flick, U. (2009). *An introduction to qualitative research* (4th ed.). Los Angeles: SAGE.

Fowler, R. K. (1998). The university library as learning organization for innovation: An exploratory study. *College & Research Libraries, 59*(3), 220 - 231.

Franklin, B. (2009). Aligning library strategy and structure with the campus academic plan: A case study. *Journal of Library Administration, 49*(5), 495-505. doi:10.1080/01930820903090862

Franklin, B. (2010). Organizational and strategic alignment for academic libraries. In B. I. Dewey (Ed.), *Transforming research libraries for the global knowledge society* (pp. 69-83). Oxford: Chandos

Freeman, R. E. (1984). *Strategic management: A stakeholder approach*. Boston: Pitman.

Freeman, R. E. (2010). *Stakeholder theory: The state of the art*. Cambridge: Cambridge University Press.

Freeman, R. E., Wicks, A. C., & Parmar, B. (2004). Stakeholder theory and "The Corporate Objective Revisited". *Organization Science, 15*(3), 364-369. doi:10.1287/orsc.1040.0066

Friedman, A. L., & Miles, S. (2006). *Stakeholders: Theory and practice*. New York: Oxford University Press.

Furst-Bowe, J. A., & Bauer, R. A. (2007). Application of the Baldrige model for innovation in higher education. *New Directions for Higher Education, 2007*(137), 5-14.

Gable, G. (2007). The value of a methodical approach to research: slides for LDP2.4 [Slides].

Galletta, A. (2013). *Mastering the semi-structured interview and beyond: From research design to analysis and publication*. New York: NYU Press.

Galligan, F., & Dyas-Correia, S. (2013). Altmetrics: Rethinking the way we measure. *Serials Review, 39*(1), 56-61. doi:10.1016/j.serrev.2013.01.003

Gardiner, P., & Whiting, P. (1997). Success factors in learning organizations: An empirical study. *Industrial and Commercial training, 29*(2), 41-48. doi:10.1108/00197859710165001

Garrison, J., Ryan, M., & DeLong, K. (2012). Moving up: Positioning for director roles in academic libraries. In B. L. Eden (Ed.), *The associate university librarian handbook : A resource guide* (pp. 137-159). Lanham, MD: Scarecrow Press.

Garton, S., & Copland, F. (2010). 'I like this interview; I get cakes and cats!': The effect of prior relationships on interview talk. *Qualitative Research, 10*(5), 533-551. Retrieved from doi:10.1177/1468794110375231

Garvin, D. A., Edmondson, A. C., & Gino, F. (2008). Is yours a learning organization? *Harvard Business Review, 86*(3), 109-116.

Gauder, B. (Ed.) (2011). *Perceptions of libraries, 2010: Context and community. A report to the OCLC membership* Dublin, Ohio: OCLC.

Ge, X. (2010). Information-seeking behavior in the digital age: A multidisciplinary study of academic researchers. *College & Research Libraries, 71*(5), 435-455.

Geertz, C. (2000). *Local knowledge: Further essays in interpretive anthropology* (3rd ed.). New York: Basic Books.

Giesecke, J., & McNeil, B. (2004). Transitioning to the learning organization. *Library Trends, 53*(1), 54-67.

Giles, T., King, L., & de Lacey, S. (2013). The timing of the literature review in grounded theory research: An open mind versus an empty head. *Advances in Nursing Science, 36*(2), E29-E40. doi:10.1097/ANS.0b013e3182902035

Gillespie, A. (2014). Untangling the evidence: Introducing an empirical model for evidence-based library and information practice. *Information Research: An International Electronic Journal, 19*(3). Retrieved from http://www.informationr.net/ir/

Glaser, B. G. (1978). *Theoretical sensitivity*. Mill Valley, CA: The Sociology Press.

Glaser, B. G. (1992). *Basics of grounded theory analysis*. Mill Valley, CA: Sociology Press.

Glaser, B. G. (1998). *Doing grounded theory: Issues and discussions*. Mill Valley, CA: Sociology Press.

Glaser, B. G. (2001). *The grounded theory perspective: Conceptualization contrasted with description*. Mill Valley, CA: Sociology Press.

Glaser, B. G. (2002). Constructivist grounded theory? *Forum : Qualitative Social Research, 3*(3). Retrieved from http://www.qualitative-research.net/index.php/fqs/article/view/825

Glaser, B. G. (2005). *The grounded theory perspective III: Theoretical coding*. Mill Valley, CA: Sociology Press.

Glaser, B. G. (2012). No preconception: The dictum. *The Grounded Theory Review: An international journal, 11*(2). Retrieved from http://groundedtheoryreview.com/2012/11/28/no-preconception-the-dictum/

Glaser, B. G., & Strauss, A. G. (1967). *Discovery of grounded theory : Strategies for qualitative research*. New York: Aldine

Goldman, E. F., & Casey, A. (2010). Building a culture that encourages strategic thinking. *Journal of Leadership & Organizational Studies, 17*(2), 119-128. doi:10.1177/1548051810369677

Grafton, A. (2009). Apocalypse in the stacks? The research library in the age of Google. *Daedalus, 138*(1), 87-98.

Gregor, S. (2006). The nature of theory in information systems. *MIS Quarterly, 30*(3), 611-642. doi:10.2307/25148742

Group of Eight Australia. (n.d.). Group of Eight Australia. Retrieved from https://go8.edu.au/

Guba, E. G. (1990). The alternative paradigm dialog. In E. G. Guba (Ed.), *The paradigm dialog* (pp. 17-27). Newbury Park, CA: SAGE.

Guba, E. G., & Lincoln, Y. S. (1989). *Fourth generation evaluation*. Newbury Park: SAGE.

Guest, G., Bunce, A., & Johnson, L. (2006). How many interviews are enough?: An experiment with data saturation and variability. *Field Methods, 18*(1), 59-82. doi:10.1177/1525822x05279903

Gwyer, R. (2015). Identifying and exploring future trends impacting on academic libraries: A mixed methodology using journal content analysis, focus groups, and trend reports. *New Review of Academic Librarianship, 21*(3), 269-285. doi:10.1080/13614533.2015.1026452

Haglund, L., & Olsson, P. (2008). The impact on university libraries of changes in information behavior among academic researchers: A multiple case study. *The Journal of Academic Librarianship, 34*(1), 52-59. doi:10.1016/j.acalib.2007.11.010

Hall, L. W., & McBain, I. (2014). Practitioner research in an academic library: Evaluating the impact of a support group. *Australian Library Journal, 63*(2), 129-143.

Hallam, G., Hiskens, A., & Ong, R. (2014). Conceptualising the learning organisation: Creating a maturity framework to develop a shared understanding of the library's role in literacy and learning. *Australian Library Journal, 63*(2), 78-93. doi:10.1080/00049670.2014.898235

Hamilton, B. J. (2013). *Embedded librarianship: Tools and practices*. Chicago: American Library Association.

Harlan, M. A. (2012). *Information practices of teen content creators : The intersection of action and experiences a grounded theory study.* (Doctoral dissertation). Retrieved from http://eprints.qut.edu.au/57125/

Henry, L. S. (2015). Marketing, publicity, and outreach In F. Wilkinson & R. Lubas (Eds.), *Practical strategies for academic library managers* (pp. 63-73). Santa Barbara, CA: ABC-CLIO.

Henwood, K., & Pidgeon, N. (2003). Grounded theory in psychological research. In P. M. Camic, J. E. Rhodes, & L. Yardley (Eds.), *Qualitative research in psychology: Expanding perspectives in methodology and design.* (pp. 131-155). Washington, DC: American Psychological Association.

Hernon, P., Altman, E., & Dugan, R. E. (2015). *Assessing service quality : Satisfying the expectations of library customers* (3rd ed.). Chicago: American Library Association.

Hernon, P., Dugan, R. E., & Matthews, J. R. (2014). *Getting started with evaluation*. Chicago: American Library Association.

Hernon, P., & Matthews, J. R. (2013). *Reflecting on the future of academic and public libraries*. Chicago: ALA Editions.

Herring, J. E. (2013). Constructivist grounded theory: A 21st century research methodology. In K. Williamson & G. Johanson (Eds.), *Research methods: Information, systems, and contexts* (pp. 203-218). Prahran, Vic.: Tilde.

Higginbottom, G., & Lauridsen, E. I. (2014). The roots and development of constructivist grounded theory. *Nurse Researcher, 21*(5), 8-13. doi:10.7748/nr.21.5.8.e1208

Hiller, H. H., & DiLuzio, L. (2004). The interviewee and the research interview: Analysing a neglected dimension in research. *The Canadian Review of Sociology and Anthropology, 41*(1), 1-26.

Hishiya, Y. (2014). *How do U.S. military servicemen decide to marry Japanese women?: A constructivist grounded theory inquiry.* (Doctoral dissertation). Retrieved from http://gateway.library.qut.edu.au/login?url=http://search.proquest.com/docview/1552484600?accountid=13380

Holland, M., & Denning, T. (2011). Making the repository count: Lessons from successful implementation. In P. Dale, J. Beard, & M. Holland (Eds.), *University libraries and digital learning environments* (pp. 135-150). Farnham, UK: Gower.

Holton, J. A. (2007). The coding process and its challenges. In A. Bryant & K. Charmaz (Eds.), *The SAGE handbook of grounded theory* (pp. 265-289). Los Angeles, CA: SAGE.

Hong, J. (1999). Structuring for organizational learning. *The Learning Organization, 6*(4), 173-185.

Hoppe, M. H. (2006). *Active listening : Improve your ability to listen and lead*. Greensboro, NC: Center for Creative Leadership.

Hoppenfeld, J., & Malafi, E. (2015). Engaging with entrepreneurs in academic and public libraries. *Reference Services Review, 43*(3), 379-399. doi:10.1108/RSR-02-2015-0011

Hossain, M. J., & Islam, A. (2012). Understanding perceived service quality and satisfaction. *Performance Measurement and Metrics, 13*(3), 169-182. doi:10.1108/14678041211284713

Hsu, C.-C., & Sandford, B. A. (2007). The Delphi technique: Making sense of consensus. *Practical Assessment, Research & Evaluation, 12*(10), 1-8.

Huber, G. P. (1991). Organizational learning: The contributing processes and the literatures. *Organization Science, 2*(1), 88-115. doi:10.2307/2634941

Innovative Research Universities. (2015). Innovative Research Universities. Retrieved from http://www.iru.edu.au/contact-iru.aspx

International Association of Universities (Ed.) (2015). *International handbook of universities 2016* (27th ed. Vol. 3). Basingstoke, UK: Palgrave Macmillan.

Iselin, D. (2010). *How principals are cultivating sustainable school cultures within Christian schools during changing times.* (Doctoral dissertation). Retrieved from http://espace.library.uq.edu.au/view/UQ:237834

Jain, P., & Mutula, S. (2008). Libraries as learning organisations: Implications for knowledge management. *Library Hi Tech News, 25*(8), 10-14. doi:10.1108/07419050810931273

Jamali, H. R., & Asadi, S. (2010). Google and the scholar: The role of Google in scientists' information-seeking behaviour. *Online Information Review, 34*(2), 282-294. doi:10.1108/14684521011036990

Janis, I. L. (1982). *Groupthink: Psychological studies of policy decisions and fiascoes*. Boston, MA: Wadsworth.

Jantz, R. C. (2012a). A framework for studying organizational innovation in research libraries. *College & Research Libraries, 73*(6), 525-541.

Jantz, R. C. (2012b). Innovation in academic libraries: An analysis of university librarians' perspectives. *Library & Information Science Research, 34*(1), 3-12. doi:10.1016/j.lisr.2011.07.008

Jantz, R. C. (2013). *Incremental and radical innovations in research libraries: An exploratory examination regarding the effects of ambidexterity, organizational structure, leadership and contextual factors.* (Doctoral dissertation). Retrieved from http://gateway.library.qut.edu.au/login?url=http://search.proquest.com/docview/1442192614?accountid=13380

Jantz, R. C. (2015). The determinants of organizational innovation: An interpretation and implications for research libraries. *College & Research Libraries, 76*(4), 512-536. doi:10.5860/crl.76.4.512

Jeal, Y. (2014). Strategic alignment at the University of Manchester library: Ambitions, transitions, and new values. *New Review of Academic Librarianship, 20*(3), 278-295. doi:10.1080/13614533.2014.919328

Johnson, L., Adams Becker, S., Estrada, V., & Freeman, A. (2015). *NMC horizon report: 2015 library edition* Retrieved from http://cdn.nmc.org/media/2015-nmc-horizon-report-library-EN.pdf

Jubb, M., Rowlands, I., & Nicholas, D. (2013). Value of libraries: Relationships between provision, usage, and research outcomes. *Evidence Based Library and Information Practice, 8*(2), 139-152.

Jurow, S. (1996). Core competencies: Strategic thinking about the work we choose to do. *The Journal of Academic Librarianship, 22*(4), 300-302.

Kaplan, R. S., & Norton, D. P. (1996). *The balanced scorecard: Translating strategy into action*. Boston, Mass: Harvard Business School Press.

Karkoulian, S., Messarra, L. C., & McCarthy, R. (2013). The intriguing art of knowledge management and its relation to learning organizations. *Journal of knowledge management, 17*(4), 511-526. doi:10.1108/JKM-03-2013-0102

Kassim, N. A., & Nor, A. M. (2007). Team learning in a learning organization: The practices of team learning among university librarians in Malaysia. *Malaysian Journal of Library & Information Science, 12*(1), 55-64.

Kaur, K. (2010). Service quality and customer satisfaction in academic libraries. *Library Review, 59*(4), 261-273. doi:10.1108/00242531011038578

Khiat, H. (2010). A grounded theory approach: Conceptions of understanding in engineering mathematics learning. *The Qualitative Report, 15*(6), 1459-1488.

Kindström, D., Kowalkowski, C., & Sandberg, E. (2013). Enabling service innovation: A dynamic capabilities approach. *Journal of Business Research, 66*(8), 1063-1073.

Kotter, J. P. (1996). *Leading change*. Boston, MA: Harvard Business School Press.

Koufogiannakis, D. (2013). Academic librarians use evidence for convincing: A qualitative study. *SAGE Open, 3*(2), 1-12. doi:doi:10.1177/2158244013490708

Koufogiannakis, D. (2015). Determinants of evidence use in academic librarian decision making. *College & Research Libraries, 76*(1), 100-114. doi:10.5860/crl.76.1.100

Kumar, V., & Reinartz, W. J. (2011). *Customer relationship management: Concept, strategy, and tools* (2nd ed.). Berlin: Springer.

Lempert, L. B. (2007). Asking questions of the data: Memo writing in the grounded theory tradition. In A. Bryant & K. Charmaz (Eds.), *The SAGE handbook of grounded theory* (pp. 245-264). Los Angeles, CA: SAGE.

Leong, J. (2014). Purpose-driven learning for library staff. *The Australian Library Journal, 63*(2), 108-117. doi:10.1080/00049670.2014.898236

Leong, J., & Anderson, C. (2012). Fostering innovation through cultural change. *Library Management, 33*(8/9), 490-497. doi:10.1108/01435121211279858

Lewis, D. W. (2007). *A model for academic libraries 2005 to 2025*. Paper presented at the Visions of Change, California State University, Sacramento. https://scholarworks.iupui.edu/bitstream/handle/1805/665/A20Academic202005202025.pdf?sequence=6

Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Newbury Park, CA: SAGE.

Lincoln, Y. S., Lynham, S. A., & Guba, E. G. (2011). Paradigmatic controversies, contradictions, and emerging confluences, revisited. In N. K. Denzin & Y. S. Lincoln (Eds.), *The SAGE handbook of qualitative research* (4th ed., pp. 97-128). Los Angeles: SAGE.

Lloyd-Zandiotis, A. (2005). *Working information : Developing a grounded theory of information literacy in the workplace* (Doctoral dissertation), University of New England.

Lock, A., & Strong, T. (2010). *Social constructionism: Sources and stirrings in theory and practice*. Cambridge: Cambridge University Press.

Locke, K. (2003). *Grounded theory in management research*. London: SAGE

Lofland, J., & Lofland, L. (1995). *Analyzing social settings: A guide to qualitative observation and analysis* (3rd ed.). Belmont, CA: Wadsworth.

Loftus, W. (2012). Demonstrating success: Web analytics and continuous improvement. *Journal of Web Librarianship, 6*(1), 45-55. doi:10.1080/19322909.2012.651416

Long, M. P., & Schonfeld, R. C. (2014). *Ithaka S+R US library survey 2013* Retrieved from https://scholar.google.com.au/scholar?hl=en&q=Long+Schonfield+Ithaka&btnG=&as_sdt=1%2C5&as_sdtp=

Lubas, R. L., & Wilkinson, F. C. (2015). If it's Tuesday, there must be a reorg - or, nimble library structures. In F. Wilkinson & R. Lubas (Eds.), *Practical strategies for academic library managers: Leading with vision through all levels*. Santa Barbara, CA: ABC-CLIO.

Luchs, M. G. (2015). A brief introduction to design thinking. In M. G. Luchs, K. S. Swan, & A. Griffin (Eds.), *Design thinking: New product development essentials from the PDMA* (pp. 1-12). Hoboken, NJ: Wiley.

Luft, J. (1984). *Group processes: An introduction to group dynamics* (3rd ed.). Mountain View, CA: Mayfield.

Lynham, S. A. (2013). General method of theory building in applied disciplines. In R. A. Swanson & T. J. Chermack (Eds.), *Theory building in applied disciplines* (pp. 29-45). San Francisco: Berrett-Koehler.

MacColl, J., & Jubb, M. (2011). *Supporting research: Environments, administration and libraries*. Dublin, OH: OCLC Research.

Machi, L. A., & McEvoy, B. T. (2012). *The literature review: Six steps to success* (2nd ed.). Thousand Oaks, CA: Corwin.

Maloney, K., Antelman, K., Arlitsch, K., & Butler, J. (2010). Future leaders' views on organizational culture. *College & Research Libraries, 71*(4), 322-347. doi:10.5860/crl-47

Mandeville-Gamble, S. (2015). Communicating and implementing an organization vision. In F. Wilkinson & R. Lubas (Eds.), *Practical strategies for academic library managers* (pp. 1-13). Santa Barbara, CA: ABC-CLIO.

Mansourian, Y. (2006). Adoption of grounded theory in LIS research. *New Library World, 107*(9/10), 386-402. doi:10.1108/03074800610702589

Manuel, S., Dearnley, J., & Walton, G. (2010). Continuous improvement methodology applied to United Kingdom academic library websites via national survey results. *New Review of Information Networking, 15*(2), 55-80. doi:10.1080/13614576.2010.519968

Marginson, S. (2002a). Education in the global market: Lessons from Australia. *Academe, 88*(3), 22-24.

Marginson, S. (2002b). Nation-building universities in a global environment: The case of australia. *Higher Education, 43*(3), 409-428. doi:10.1023/A:1014691304966

Marginson, S. (2004). National and global competition in higher education. *Australian Educational Researcher, 31*(2), 1-28.

Marginson, S. (2006). Dynamics of national and global competition in higher education. *Higher Education, 52*(1), 1-39. doi:10.1007/s10734-004-7649-x

Marginson, S., & Considine, M. (2000). *The enterprise university*. Cambridge: Cambridge University Press.

Marginson, S., & van der Wende, M. (2009). The new global landscape of nations and institutions. In OECD (Ed.), *Higher education to 2030* (Vol. 2, pp. 17-62). Paris: OECD Publishing.

Marshall, C., & Rossman, G. B. (2015). *Designing qualitative research* (6th ed.). Thousand Oaks, CA.: SAGE.

Marsick, V. J., & Watkins, K. E. (1999). *Facilitating learning organizations: Making learning count*. Aldershot, UK: Gower.

Marsick, V. J., & Watkins, K. E. (2003). Demonstrating the value of an organization's learning culture: The Dimensions of the Learning Organization Questionnaire. *Advances in Developing Human Resources, 5*(2), 132-151. doi:10.1177/1523422303005002002

Mason, J. (2002). *Qualitative researching* (2nd ed.). London: SAGE.

Mason, M. (2010). Sample size and saturation in PhD studies using qualitative interviews. *Forum : Qualitative Social Research, 11*(3). Retrieved from http://www.qualitative-research.net/index.php/fqs/article/view/1428/3028

Mavrinac, M. A. (2005). Transformational leadership: Peer mentoring as a values-based learning process. *portal: Libraries and the Academy, 5*(3), 391-404. doi:10.1353/pla.2005.0037

McBain, I., Culshaw, H., & Walkley Hall, L. (2013). Establishing a culture of research practice in an academic library: An Australian case study. *Library Management, 34*(6/7), 448-461. doi:10.1108/LM-08-2012-0053

McNicol, S. (2005). The challenges of strategic planning in academic libraries. *New Library World, 106*(11/12), 496-509.

Meinel, C., & Leifer, L. (2014). Introduction: Design thinking is mainly about building innovators. In H. Plattner, C. Meinel, & L. Leifer (Eds.), *Design thinking research : Building innovators* (pp. 1-10). Cham, Switzerland: Springer

Merton, R. K. (1968). *Social theory and social structure*. New York: Free Press.

Mestre, L. S., & LeCrone, J. M. (2015). Elevating the student assistant: An integrated development program for student library assistants. *College & Undergraduate Libraries, 22*(1), 1-20. doi:10.1080/10691316.2015.1001240

Meulemans, Y. N., & Carr, A. (2013). Not at your service: Building genuine faculty-librarian partnerships. *Reference Services Review, 41*(1), 80-90. doi:10.1108/00907321311300893

Meyer, A. D. (1982). Adapting to environmental jolts. *Administrative Science Quarterly, 27*(4), 515-537. doi:10.2307/2392528

Michalak, S. C. (2012). This changes everything: Transforming the academic library. *Journal of Library Administration, 52*(5), 411-423. doi:10.1080/01930826.2012.700801

Mierke, J., & Williamson, V. (2017). A framework for achieving organizational culture change. *Library Leadership & Management (Online), 31*(2), 16-11E-16E. Retrieved from https://journals.tdl.org/llm/index.php/llm

Miller, S., & Murillo, N. (2012). Why don't students ask librarians for help? Undergraduate help-seeking behaviour in three academic libraries. In L. M. Duke & A. D. Asher (Eds.), *College libraries and student culture: What we now know* (pp. 49-70). Chicago: American Library Association.

Mills, J., Bonner, A., & Francis, K. (2006a). Adopting a constructivist approach to grounded theory: Implications for research design *International Journal of Nursing Practice, 12*(1), 8-13. doi:10.1111/j.1440-172X.2006.00543.x

Mills, J., Bonner, A., & Francis, K. (2006b). The development of constructivist grounded theory. *International Journal of Qualitative Methods, 5*(1), 25-35.

Morse, J. M. (2007). Sampling in grounded theory. In A. Bryant & K. Charmaz (Eds.), *The SAGE handbook of grounded theory* (pp. 229-244). Los Angeles, CA: SAGE.

Morse, J. M., Stern, P. N., Corbin, J., Bowers, B., Charmaz, K., & Clarke, A. E. (2009). *Developing grounded theory: The second generation*. Walnut Creek, CA: Left Coast Press.

Mossop, S. (2013a). *Achieving transformational change in academic libraries*. Oxford: Chandos

Mossop, S. (2013b). So what is 'transformational change'? In S. Mossop (Ed.), Achieving transformational change in academic libraries (pp. 3-20). Oxford: Chandos.

Mumford, M. D., Hester, K. S., & Robledo, I. C. (2012). Creativity in organizations: Importance and approaches. In M. D. Mumford (Ed.), *Handbook of organizational creativity* (pp. 3-16). London: Academic Press.

Murray-Webster, R. (2016). How groups shape information decisions. In L. Bourne (Ed.), *Advising upwards: A framework for understanding and engaging senior management stakeholders* (pp. 141-169). Abingdon, UK: Routledge.

Nanus, B. (1992). *Visionary leadership: Creating a compelling sense of direction for your organization*. San Francisco: Jossey-Bass.

Nevis, E. C., DiBella, A. J., & Gould, J. M. (1995). Understanding organizations as learning systems. *Sloan Management Review, 36*(2), 73.

Nguyen, L. C. (2014). *A participatory library model for university libraries.* (Doctoral dissertation). Retrieved from http://eprints.qut.edu.au/76288/

Nguyen, L. C. (2015). Establishing a participatory library model: A grounded theory study. *The Journal of Academic Librarianship, 41*(4), 475-487. doi:10.1016/j.acalib.2015.03.018

Nguyen, L. C., Partridge, H., & Edwards, S. L. (2012). Understanding the participatory library through a grounded theory study. *Proceedings of the ASIST Annual Meeting, 49*(1). doi:10.1002/meet.14504901051

Nicholas, D., Rowlands, I., Jubb, M., & Jamali, H. R. (2010). The impact of the economic downturn on libraries: With special reference to university libraries. *The Journal of Academic Librarianship, 36*(5), 376-382. doi:10.1016/j.acalib.2010.06.001

Nold, H., & Michel, L. (2016). The performance triangle: A model for corporate agility. *Leadership and Organization Development Journal, 37*(3), 341-356. doi:10.1108/LODJ-07-2014-0123

Nutefall, J. E., & Chadwell, F. A. (2012). Preparing for the 21st century academic library realignment. *New Library World, 113*(3/4), 162-173. doi:10.1108/03074801211218543

O'Reilly, K. (2009). *Key concepts in ethnography* London: SAGE.

Oakleaf, M. (2010). *Value of academic libraries: A comprehensive research review and report* Retrieved from http://www.ala.org/acrl/sites/ala.org.acrl/files/content/issues/value/val_report.pdf

Oakleaf, M. (2011). What's the value of an academic library? The development of the ACRL value of academic libraries comprehensive research review and report. *Australian Academic and Research Libraries, 42*(1), 1-13.

Odendahl, T., & Shaw, A. M. (2001). Interviewing elites. In J. F. Gubrium & J. A. Holstein (Eds.), *Handbook of interview research: Context and method* (pp. 299-316). Thousand Oaks, CA: Sage

Ordanini, A., & Parasuraman, A. (2011). Service innovation viewed through a service-dominant logic lens: A conceptual framework and empirical analysis. *Journal of Service Research, 14*(1), 3-23. doi:10.1177/1094670510385332

Örtenblad, A. (2004). The learning organization: Towards an integrated model. *The Learning Organization, 11*(2/3), 129-144.

Örtenblad, A. (2013). What do we mean by the learning organization? In A. Örtenblad (Ed.), *Handbook of research on the learning organization: Adaptation and context* (pp. 3-21). Cheltenham: Edward Elgar

Örtenblad, A. (2015). Towards increased relevance: Context-adapted models of the learning organization. *The Learning Organization, 22*(3), 163-181. doi:10.1108/TLO-06-2014-0027

Örtenblad, A., Fan, Z., Peng, C., Li, B., Li, Z., Cong, X., & Zhou, J. (2013). Putting the learning organization into context: Contributions from previous works In A. Örtenblad (Ed.), *Handbook of research on the learning organization : Adaptation and context* (pp. 35-50). Cheltenham: Edward Elgar

Otero-Boisvert, M. (2015). *Funding the academic library: An ethnographic study.* (Doctoral dissertation). Retrieved from http://eprints.qut.edu.au/84749/

Parasuraman, A. (2004). Assessing and improving service performance for maximum impact: Insights from a two-decade-long research journey. *Performance Measurement and Metrics, 5*(2), 45-52.

Partridge, H. L., Edwards, S. L., & Thorpe, C. E. (2010). Evidence-based practice : Information professionals' experience of information literacy in the workplace. In A. Lloyd & S. Talja (Eds.), *Practising information literacy : Bringing theories of learning, practice and information literacy together* (pp. 273-298). Wagga Wagga, NSW: Centre for Information Studies, Charles Sturt University.

Patton, M. Q. (2002). *Qualitative research and evaluation methods* (3rd ed.). Thousand Oaks, CA: SAGE

Pearn, M. A., Roderick, C., & Mulrooney, C. (1995). *Learning organizations in practice*. New York: McGraw-Hill.

Peelen, E., & Beltman, R. (2013). *Customer relationship management* (2nd ed.). Boston, MA: Pearson.

Perry, J., & Woodsworth, A. (1995). Innovation and change: Can we learn from corporate models? *The Journal of Academic Librarianship, 21*(2), 117-120. doi:10.1016/0099-1333(95)90124-8

Peters, C., & Dryden, A. R. (2011). Assessing the academic library's role in campus-wide research data management: A first step at the University of Houston. *Science & Technology Libraries, 30*(4), 387-403. doi:10.1080/0194262X.2011.626340

Philips, R. A. (2011). *Stakeholder theory: Impact and prospects*. Cheltenham, UK: Edward Elgar.

Phipps, S. E. (2004). The system design approach to organizational development: The University of Arizona model. *Library Trends, 53*(1), 68-111.

Pickard, A. J. (2013). *Research methods in information*. London: Facet Publishing.

Plant, T. (2009). Holistic strategic planning in the public sector. *Performance Improvement, 48*(2), 38-43.

Qu, S. Q., & Dumay, J. (2011). The qualitative research interview. *Qualitative Research in Accounting & Management, 8*(3), 238-264. doi:10.1108/11766091111162070

Quinn, B. (1997). Adapting service quality concepts to academic libraries. *The Journal of Academic Librarianship, 23*(5), 359-369. doi:10.1016/S0099-1333(97)90033-1

Ralph, L., & Tijerino, C. (2009). Knowledge management and library culture. *College & Undergraduate Libraries, 16*(4), 329-337. doi:10.1080/10691310903355960

Ramirez, G. B. (2015). Case study. In C. Marshall & G. B. Rossman (Eds.), *Designing qualitative research* (6th ed., pp. 20-21). Thousand Oaks, CA.: SAGE.

Recker, J. (2013). *Scientific research in information systems: A beginner's guide*. New York: Springer.

Regional Universities Network. (2015). Regional Universities Network. Retrieved from http://www.run.edu.au/

Reichertz, J. (2007). Abduction: The logic of Discovery of grounded theory. In A. Bryant & K. Charmaz (Eds.), *The SAGE handbook of grounded theory* (pp. 214-228). Los Angeles: SAGE.

Reid, M. M. (2011). Is the balanced scorecard right for academic libraries? *The Bottom Line, 24*(2), 85-95. doi:10.1108/08880451111169106

Renner, F., Clark, C., Shilkin, B., Benn, J., Albatis, M., & Howard, R. (2014). 'Thanks for being awesome': Using the learning organisation model to enhance university library and IT client service. *Australian Library Journal, 63*(2), 118-128.

Richards, L. (2009). *Handling qualitative data: A practical guide* (2nd ed.). London: SAGE.

Richards, L., & Morse, J. M. (2007). *Readme first for a user's guide to qualitative methods*. Thousand Oaks, CA: SAGE

Richmond, V. P., McCroskey, J. C., & Hickson, M. L. (2008). *Nonverbal behavior in interpersonal relations* (6th ed.). Boston, MA: Pearson.

Riemer, N. (2015). University deregulation. *Arena Magazine*(134, Feb/Mar 2015), 12-14.

Robertson, M. (2015). Perceptions of Canadian provosts on the institutional role of academic libraries. *College & Research Libraries, 76*(4), 490-511. doi:10.5860/crl.76.4.490

Ross, R., Smith, B., Roberts, C., & Kleiner, A. (1994). Core concepts about learning in organizations. In P. M. Senge, A. Kleiner, C. Roberts, R. B. Ross, & B. J. Smith (Eds.), *The fifth discipline fieldbook: Strategies and tools for building a learning organization* (pp. 48-52). London: Nicholas Brealey

Roulston, K. J., Baker, C. D., & Liljestrom, A. (2001). Analyzing the researcher's work in generating data: The case of complaints. *Qualitative Inquiry, 7*(6), 745-772. doi:10.1177/107780040100700607

Rowley, J. (1997). The library as a learning organization. *Library Management, 18*(2), 88-91. doi:10.1108/01435129710157707

Rowley, J. (2011). Should your library have an innovation strategy? *Library Management, 32*(4/5), 251-265. doi:10.1108/01435121111132266

Saarti, J., & Juntunen, A. (2011). Bringing out the best of everyone. *Library Management, 32*(8/9), 579-588. doi:10.1108/01435121111187932

Saldaña, J. (2013). *The coding manual for qualitative researchers* (2nd ed.). London: SAGE.

Salerno, C. (2004). Public money and private providers: Funding channels and national patterns in four countries. *Higher Education, 48*(1), 101-130.

Saunders, L. (2015). Academic libraries' strategic plans: Top trends and under-recognized areas. *The Journal of Academic Librarianship, 41*(3), 285-291. doi:10.1016/j.acalib.2015.03.011

Saunders, L. (2016). Room for improvement: Priorities in academic libraries' strategic plans. *Journal of Library Administration, 56*(1), 1-16. doi:10.1080/01930826.2015.1105029

Schein, E. H. (2010). *Organizational culture and leadership* (4th ed.). Hoboken, NJ: Jossey-Bass.

Schwandt, D. R., & Marquardt, M. J. (1999). *Organizational learning: From world-class theories to global best-practices* Boca Raton, FL: St Lucie Press.

Selden, L. (2005). On grounded theory - with some malice. *Journal of Documentation, 61*(1), 114-129. doi:10.1108/00220410510578041

Senge, P. M. (1990). *The fifth discipline: The art and practice of the learning organization*. New York: Doubleday.

Senge, P. M. (2006). *The fifth discipline: The art and practice of the learning organization* (Rev. ed.). London: Random House.

Shapiro, S. (2014). The internet, web-based technologies, and user vs. library empowerment in academic institutions. *Journal of Electronic Resources Librarianship, 26*(3), 216-221. doi:10.1080/1941126X.2014.939042

Shapiro, S. (2016). Engaging a wider community: The academic library as a center for creativity, discovery, and collaboration. *New Review of Academic Librarianship, 22*(1), 24-42. doi:10.1080/13614533.2015.1087412

Shaw, K., & Spink, A. (2009). University library virtual reference services: Best practices and continuous improvement. *Australian Academic and Research Libraries, 40*(3), 192-205. doi:10.1080/00048623.2009.10721404

Shepstone, C., & Currie, L. (2013). Building on our strengths: Working towards a preferred workplace culture In K. Blessinger & P. Hrycaj (Eds.), *Workplace culture in academic libraries* (pp. 21-38). Oxford: Chandos.

Shoid, M. S. M., & Kassim, N. A. (2013). Ascertaining dimensions of Organizational Learning Capabilities (OLC) in academic library. *International Journal of Academic Research in Business and Social Sciences, 3*(7), 546-554. Retrieved from http://hrmars.com/index.php/journals/archive_detail/IJARBSS/60

Sidorko, P. E., & Yang, T. T. (2011). Knowledge exchange and community engagement: An academic library perspective. *Library Management, 32*(6/7), 385-397. doi:10.1108/01435121111158538

Silverman, D. (2013a). *Doing qualitative research* (4th ed.). Thousand Oaks, CA: SAGE.

Silverman, D. (2013b). What counts as qualitative research? Some cautionary comments. *Qualitative Sociology Review, 9*(2), 48-55.

Sloan, P. (2009). Redefining stakeholder engagement. *Journal of Corporate Citizenship, 2009*(36), 25-40. doi:10.9774/GLEAF.4700.2009.wi.00005

Sloane, C. (2014). Media release: University of Sydney library sheds workers, cuts services. Retrieved from http://www.nteu.org.au/article/Media-Release%3A-University-of-Sydney-library-sheds-workers,-cuts-services-16645

Smith, K. D., & Taylor, W. G. K. (2000). The learning organisation ideal in civil service organisations: Deriving a measure. *The Learning Organization, 7*(4), 194-205.

Smith, P. A. C., & Tosey, P. (1999). Assessing the learning organisation: Part 1 - theoretical foundations. *The Learning Organization, 6*(2), 70-75. doi:10.1108/09696479910262596

Somerville, M. M. (2015). *Informed systems: Organizational design for learning in action*. Amsterdam: Chandos

Somerville, M. M., & Brar, N. (2009). A user-centered and evidence-based approach for digital library projects. *The Electronic Library, 27*(3), 409-425. doi:10.1108/02640470910966862

Somerville, M. M., Cooper, L., Torhell, C., & Hashert, C. (2015). At home in the world: International library staff exchange program highlights. *IFLA Journal, 41*(4), 326-335. doi:10.1177/0340035215596348

Somerville, M. M., & Farner, M. (2012). Appreciative inquiry: A transformative approach for initiating shared leadership and organizational learning. *Revista de Cercetare si Interventie Sociala, 38*, 7-24.

Somerville, M. M., & Howard, Z. (2010). "Information in context": Co-designing workplace structures and systems for organizational learning. *Information Research: An International Electronic Journal, 15*(4), 1-10. Retrieved from http://www.informationr.net/ir/15-4/paper447.html

Somerville, M. M., & Mirijamdotter, A. (2014). Information experiences in the workplace: Foundations for an informed systems approach. In C. Bruce, K. Davis, H. Hughes, H. Partridge, & I. Stoodley (Eds.), *Information experience: Approaches to theory and practice* (pp. 203-220). Bingley, UK: Emerald

Sower, V., & Fair, F. (2012). *Insightful quality: Beyond continuous improvement*. New York: Business Expert Press.

Spezi, V., Creaser, C., & Conyers, A. (2015). The impact of RDS on usage of electronic content in UK academic libraries: Selected results from a UKSG-funded project. *Serials Review, 41*(2), 85-99. doi:10.1080/00987913.2015.1035991

Stoffle, C. J., & Cuillier, C. (2010). From surviving to thriving. *Journal of Library Administration, 51*(1), 130-155. doi:10.1080/01930826.2011.531645

Strauss, A. L. (1987). *Qualitative analysis for social scientists*. Cambridge: Cambridge University Press.

Strauss, A. L., & Corbin, J. (1998). Grounded theory methodology: An overview. In N. K. Denzin & Y. S. Lincoln (Eds.), *Strategies of qualitative inquiry* (pp. 158-183). Thousand Oaks, CA: SAGE.

Strauss, A. L., & Corbin, J. M. (1990). *Basics of qualitative research: Grounded theory procedures and techniques*. Newbury Park, CA: SAGE.

Strecker, B. L. (2010). *Academic librarians' perceptions of teamwork and organizational structure in a time of rapid technological change.* (Doctoral dissertation). Retrieved from http://gateway.library.qut.edu.au/login?url=http://search.proquest.com/docview/840548059?accountid=13380

Strübing, J. (2007). Research as pragmatic problem solving: The pragmatist roots of empirically-grounded theorizing. In A. Bryant & K. Charmaz (Eds.), *The SAGE handbook of grounded theory* (pp. 581-601). Los Angeles: SAGE.

Su, S. S. (2006). Individual learning and organizational learning in academic libraries. Retrieved from http://hdl.handle.net/10150/105914

Suber, P. (2012). *Open access*. Cambridge, MA: MIT Press.

Sun, P. Y. T., & Scott, J. L. (2003). Exploring the divide - organizational learning and learning organization. *The Learning Organization, 10*(4), 202-215. doi:10.1108/09696470310476972

Swan, A. (2011). Institutional repositories - now and next. In P. Dale, J. Beard, & M. Holland (Eds.), *University libraries and digital learning environments* (pp. 119-133). Farnham, UK: Gower

Swanson, R. A., & Chermack, T. J. (2013). *Theory building in applied disciplines*. San Francisco, CA: Berrett-Koehler

Tait, A., & Blinco, K. (2014). Seeding a learning organisation. *Australian Library Journal, 63*(2), 94-107.

Tan siew chye, M., & Higgins, S. E. (2002). NTU (Nanyang Technological University) library as a learning organisation. *Libri (København), 52*, 169-182.

Teece, D. J. (2007). Explicating dynamic capabilities: The nature and microfoundations of (sustainable) enterprise performance. *Strategic Management Journal, 28*(13), 1319-1350. doi:10.2307/20141992

Teece, D. J., Pisano, G., & Shuen, A. (1997). Dynamic capabilities and strategic management. *Strategic Management Journal, 18*(7), 509-533.

Tellis, G. J. (2006). Disruptive technology or visionary leadership? *Journal of Product Innovation Management, 23*(1), 34-38. doi:10.1111/j.1540-5885.2005.00179.x

Tenopir, C. (2011). Beyond usage: Measuring library outcomes and value. *Library Management, 33*(1/2), 5-13. doi:10.1108/01435121211203275

Tesch, R. (1990). *Qualitative research: Analysis types and software tools*. New York: Falmer Press.

Tiffen, B., & England, A. (2011). Engaging with clients and personalising services at UTS Library: Measuring the value for libraries and their clients. *The Australian Library Journal, 60*(3), 237-247. doi:10.1080/00049670.2011.10722620

Trail, M. A. (2013). Evolving with the faculty to face library budget cuts. *The Serials Librarian, 65*(2), 213-220. doi:10.1080/0361526X.2013.802268

Trzeciak, J. G. (2010). Building key relationships with senior campus administrators. In B. I. Dewey (Ed.), *Transforming research libraries for the global knowledge society* (pp. 85-99). Oxford: Chandos

Tsang, E. W. K. (1997). Organizational learning and the learning organization: A dichotomy between descriptive and prescriptive research. *Human Relations, 50*(1), 73-89. Retrieved from http://journals.sagepub.com/home/hum

Urquhart, C. (2007). The evolving nature of grounded theory method: The case of the information systems discipline. In A. Bryant & K. Charmaz (Eds.), *The SAGE handbook of grounded theory* (pp. 339-359). Los Angeles: SAGE.

Urquhart, C., & Fernandez, W. (2013). Using grounded theory method in information systems: The researcher as blank slate and other myths. *Journal of Information Technology, 28*(3), 224-236. doi:10.1057/jit.2012.34

Urquhart, C., Lehmann, H., & Myers, M. D. (2010). Putting the 'theory' back into grounded theory: Guidelines for grounded theory studies in information systems. *Information Systems Journal, 20*(4), 357-381. doi:10.1111/j.1365-2575.2009.00328.x

van der Maas, A. A. (2008). *Strategy implementation in a small island community: An integrative framework.* (Doctoral dissertation). Retrieved from http://repub.eur.nl/pub/12278/

Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press.

Walton, G. (2008a). Theory, research, and practice in library management 4: creativity. *Library Management, 29*(1/2), 125-131. doi:10.1108/01435120810844702

Walton, G. (2008b). Theory, research, and practice in library management 5: Branding. *Library Management, 29*(8/9), 770-776. doi:10.1108/01435120810917369

Wang, Q., Zhao, X., & Voss, C. (2016). Customer orientation and innovation: A comparative study of manufacturing and service firms. *International Journal of Production Economics, 171*, 221-230. doi:10.1016/j.ijpe.2015.08.029

Watkins, K. E., & Marsick, V. J. (1993). *Sculpting the learning organization: Lessons in the art and science of systemic change*. San Francisco: Jossey-Bass.

Whetten, D. A. (1989). What constitutes a theoretical contribution? *The Academy of Management Review, 14*(4), 490.

Williams, R. (2010). Research output of Australian universities: Are the newer institutions catching up? *Australian Universities Review, The, 52*(1), 32-36.

Williamson, K. (2013a). Questionnaires, individual interviews and focus group interviews. In K. Williamson & G. Johanson (Eds.), *Research methods: Information, systems and contexts* (pp. 349-372). Prahran, Vic: Tilde.

Williamson, K. (2013b). Research concepts. In K. Williamson & G. Johanson (Eds.), *Research methods: Information, systems and contexts* (pp. 3-23). Prahran, Vic.: Tilde.

Wilson, V., & Grant, M. J. (2013). Evidence based library and information practice: What's in it for you? *Health Information & Libraries Journal, 30*(2), 89-91. doi:10.1111/hir.12031

Wynne, B., Dixon, S., Donohue, N., & Rowlands, I. (2016). Changing the library brand: A case study. *New Review of Academic Librarianship*, 1-13. doi:10.1080/13614533.2016.1156000

Yang, B., Watkins, K. E., & Marsick, V. J. (2004). The construct of the learning organization: Dimensions, measurement, and validation. *Human Resource Development Quarterly, 15*(1), 31-55. doi:10.1002/hrdq.1086

Yeh, S.-T., & Walter, Z. (2016). Determinants of service innovation in academic libraries through the lens of disruptive innovation. *College & Research Libraries, 77*(6), 795-804. doi:10.5860/crl.77.6.795

Zahid, H. S. (2011). Identifying service superiority, zone of tolerance and underlying dimensions. *Library Review, 60*(4), 293-311. doi:10.1108/00242531111127857

Zaugg, H. (2015). Using a library impact map to assist strategic planning in academic libraries. *Library Leadership & Management, 29*(3), 1-17. Retrieved from https://journals.tdl.org/llm/index.php/llm/article/view/7102

Zhu, X. (2016). Driven adaptation: A grounded theory study of licensing electronic resources. *Library & Information Science Research, 38*(1), 69-80. doi:10.1016/j.lisr.2016.02.002

Appendices

Appendix A
Participant Recruitment Letter

Queensland University of Technology
Brisbane Australia

Subject Title:
Maintaining and extending the relevance of academic libraries in open access times: research participation invitation.

Dear

I am Fiona Harland from QUT's School of Information Systems and I'm undertaking PhD research investigating how executive leaders of academic libraries maintain and extend the relevance of their library at this present time of open access.

I am seeking executive leaders of university libraries with at least five years' experience in this role who would like to help me by participating in an hour long interview. The interview would take place at your office or location of your choice. There is a possibility of a second, shorter interview at a later stage to explore other related areas.

Your contribution to this project will help executive university librarians to develop strategies and processes in maintaining and extending the relevance of the library to its stakeholders and therefore enhancing the library's important role on campus.

Please view the attached Participant Information Sheet and Consent Form for further details on the study.

Should you wish to participate or have any questions, please contact me via email.

Please note that this study has been approved by the QUT Human Research Ethics Committee (approval number 1400000814).

Many thanks for your consideration of this request.

Kind regards

Fiona Harland
PhD Student
f.harland@hdr.qut.edu.au

Professor Glenn Stewart
Supervisor
07 3138 9480
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Professor Christine Bruce
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School of Information Systems
Science and Engineering Faculty
Queensland University of Technology (QUT)

Appendix B
Participant Information Form

Queensland University of Technology Brisbane Australia	**PARTICIPANT INFORMATION FOR QUT RESEARCH PROJECT** **– Interview –**

A grounded theory about maintaining and extending the relevance of academic libraries in open access times

QUT Ethics Approval Number 1400000814

RESEARCH TEAM

Principal Researcher:	**Fiona Harland**	PhD student
Associate Researchers:	Professor Glenn Stewart	Principal Supervisor
	Professor Christine Bruce	Associate Supervisor

School of Information Systems, Science and Engineering Faculty
Queensland University of Technology (QUT)

DESCRIPTION

This project is being undertaken as part of a PhD by Fiona Harland from QUT.

The purpose of this project is to find out how executive leaders of academic libraries maintain and extend the library's relevance to its stakeholders in this present time of high velocity technological, social and higher education policy change. This study is not seeking to evaluate the success or quality of your work, but is seeking to explore the processes and strategies used by the executive leaders of academic libraries in maintaining and extending the library's relevance to its stakeholders.

You are invited to participate in this project because, based upon the criteria for this study, you have been identified as an experienced executive leader of an academic library.

PARTICIPATION

Your participation will involve an audio recorded semi-structured interview at your library or other agreed location that will take approximately one hour of your time. You will be sent a copy of the interview questions prior to the interview.

If you are within the proximity of Brisbane you will be interviewed face-to-face.
If you are interstate you will be interviewed via Skype or telephone.

Questions will include:

- What do you perceive to be the challenges facing your library at the present time?
- How do you find out about these challenges?
- What strategies do you use to deal with these challenges?

You may be prompted in order to elaborate on some of your responses.

You may be invited to participate in a shorter follow-up interview about six months after the first interview. This interview will also be audio-recorded and may take place in-person, or by phone or Skype. The purpose of this interview is to seek information that may not have been explored in the first interview, or to follow up particular questions in greater depth.

Your participation in this project is entirely voluntary. If you do agree to participate you can withdraw from the project without comment or penalty. If you withdraw, any identifiable information already obtained from you will be destroyed within two weeks of notification of withdrawal. Your decision to participate or not participate will in no way impact upon your current or future relationship with QUT.

The data collected in this project will be published as part of my PhD thesis. It may also be published in academic or professional journals, or may be presented as part of conference papers. It is also possible the data may be used in future research by me or other QUT researchers.

EXPECTED BENEFITS

It is expected that this project will not benefit you directly, but it will benefit academic libraries in general by developing leaders' strategic management skills in achieving relevance to their stakeholders. At the completion of this study, you will be sent a two page summary of the findings.

RISKS

There are no risks beyond normal day-to-day living associated with your participation in this project.

PRIVACY AND CONFIDENTIALITY

All comments and responses will be treated confidentially.

The interview will be audio recorded and you will have the opportunity to verify your comments and responses prior to final inclusion. Audio recordings will be transcribed and will be retained in a secure place and will only be used for the purpose of transcription and data analysis and not be used for any other purpose. The audio recordings and transcriptions will only be accessed by the researcher. Audio tapes will be destroyed at the end of the research project.

It is not possible to participate in the project without being audio recorded.

CONSENT TO PARTICIPATE

We would like to ask you to sign a written consent form (enclosed) to confirm your agreement to participate.

QUESTIONS / FURTHER INFORMATION ABOUT THE PROJECT

If you have any questions or require further information please contact one of the research team members below.

Fiona Harland	0403 267 997	f.harland@hdr.qut.edu.au
Glenn Stewart	07 3138 9480	g.stewart@qut.edu.au
Christine Bruce	07 3138 2786	c.bruce@qut.edu.au

CONCERNS / COMPLAINTS REGARDING THE CONDUCT OF THE PROJECT

QUT is committed to research integrity and the ethical conduct of research projects. However, if you do have any concerns or complaints about the ethical conduct of the project you may contact the QUT Research Ethics Unit on 07 3138 5123 or email ethicscontact@qut.edu.au. The QUT Research Ethics Unit is not connected with the research project and can facilitate a resolution to your concern in an impartial manner.

***Thank you for helping with this research project. Please keep this sheet for your information*.**

Appendix C
Participant Consent Form

Queensland University of Technology
Brisbane Australia

CONSENT FORM FOR QUT RESEARCH PROJECT
– Interview –

A grounded theory about maintaining and extending the relevance of academic libraries in open access times

QUT Ethics Approval Number 1400000814

RESEARCH TEAM CONTACTS

Fiona Harland	0403 267 997	f.harland@hdr.qut.edu.au
Glenn Stewart	07 3138 9480	g.stewart@qut.edu.au
Christine Bruce	07 3138 2786	c.bruce@qut.edu.au

STATEMENT OF CONSENT

By signing below, you are indicating that you:

- Have read and understood the information document regarding this project.
- Have had any questions answered to your satisfaction.
- Understand that if you have any additional questions you can contact the research team.
- Understand that you are free to withdraw at any time without comment or penalty.
- Understand that you can contact the Research Ethics Unit on 07 3138 5123 or email ethicscontact@qut.edu.au if you have concerns about the ethical conduct of the project.
- Understand that the project will include an audio recording.
- Understand that non-identifiable data collected in this project may be used as comparative data in future projects.
- Agree to participate in the project.

Name .....

Signature .....

Date .....

Please return this sheet to the investigator.

Appendix D
Main Study Interview Protocol

Interview Protocol for Semi-structured Interviews

Thank you for agreeing to participate in this study of how executive leaders of academic libraries are achieving relevance in the current environment of high velocity technological, social and political change. This interview will include a range of questions about the challenges currently being faced by academic libraries, how you deal with the challenges, and how your staff members contribute to the task of achieving relevance. You have the opportunity to respond to these questions as you wish and you are free not to answer any question.

This interview is digitally recorded so that all details can be captured. A significant number of people will be interviewed and your anonymity is assured in the publication of final reports through identifiers such as "Participant 1" or "Large City University".

The following interview questions are semi-structured so that I may seek to probe to clarify your interpretations or prompt for further information. I am asking a main interview question, and may ask related questions if information does not emerge earlier in the interview.

1. Main interview question

1) How do you maintain the relevance of your library to your stakeholders and extended community at the present time?

2. Related interview questions

2) Who are the stakeholders in your library at the present time?
3) What do you perceive to be the challenges facing your library at the present time?
4) How do you discover the challenges that affect your library?
5) How do you deal with these challenges?
6) How do you know that you and your staff are dealing with these challenges adequately?
7) Can you think of anything else which helps the library to achieve relevance to its stakeholders?

3. Theoretical sampling questions

1) How did you make the decisions about your library restructure?
2) Are there any factors that indicate success in maintaining the library's relevance to the university?

4. Resonance questions

1) What resonated with you in this model?
2) What is still important in 2016?
3) What is of lesser importance in 2016?
4) What is missing in the model in your current context?
5) What is in the foreground?
6) What is in the background?

Appendix E
Pilot Study Interview Protocol

Thank you for agreeing to participate in this study of how executive leaders of academic libraries are achieving relevance in the current environment of high velocity technological, social and political change. This interview will include a range of questions about the challenges currently being faced by academic libraries, the strategies you use to deal with the challenges, and how your staff members and teams contribute to the task of achieving relevance. You have the opportunity to respond to these questions as you wish and you are free not to answer any question.

This interview is digitally recorded so that all details can be captured. A significant number of people will be interviewed and your anonymity is assured in the publication of final reports through identifiers such as "Participant 1" or "Large City University".

The following interview questions are semi-structured so that I may seek to probe to clarify your interpretations or prompt for further information.

1. Background questions

1) What do you regard as the library's core services?
2) Who are stakeholders in your academic library?

2. The current challenges facing academic libraries

1) What do you perceive to be the challenges facing your library at the present time?
2) How did you find out about these challenges?

3. The strategies for dealing with these challenges

1) What strategies do you use to deal with these challenges?
2) Have you instigated new products/systems/services?
3) How did you learn about this/these products/systems/services?
4) How are these products/systems or services maintaining relevance of your library to its stakeholders.

4. Learning about the changing external environment which affects the library

1) How do you learn about changes in the environment which affect your library?
2) How do you know whether you and your staff are learning through these changes and environmental scanning?

5. The contribution of individual library staff members and teams

1) How do individual staff members contribute to making the library's services relevant to its stakeholders?
2) How do you know whether individual staff members are contributing to making the library's services relevant to its stakeholders?
3) How do teams or departments contribute to making the library's services relevant to its stakeholders?
4) How do you know whether teams or departments are contributing to making the library's services relevant to its stakeholders?

6. Other considerations

1) Can you think of anything else which helps the library to achieve relevance to its stakeholders